

BOARDWATCH **MAGAZINE**

Guide to Electronic Bulletin Boards and The Internet

ROAD CREW ON THE INFORMATION HIGHWAY

What THEY drive to work

**WORLD
WIDE WEB
TRAFFIC
STATISTICS -
1814% GROWTH**

**MCI ANNOUNCES
INTERNET SERVICES**

SLIP Accounts \$19.95

VIEWS OF THE SOLAR SYSTEM

**Voyager, Viking, Magellan, Hubble
Images Online - Free**

VOICE OVER THE INTERNET

We're Talking Now

**Dennis Hayes and his
1992 Jaguar XJS**



You are the cybervisionary.



You start with a brilliant idea...

You have a **vision**. Bring your company online. Tie the workgroups to the customers. Distribute all kinds of information and electronic media. Or maybe launch a new business in cyberspace.

You need more than just a BBS — you want **an open platform** for creating your own online service. A system that is tailored to your mission. And nobody can do it better than you.

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The Major BBS® Version 6.2 gives you everything you need to **get started**: e-mail, forums, polls, file libraries, QWK, teleconference, a user registry, and more. Right away, you can plug in one or two modems in a DOS-based 386 or better and go online.

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Enjoy auto-generated **RIP graphics**, MHS importing/exporting, full multilingual support, time analysis and user reports, CD-ROM utilities, remote Sysop management, "doors" to an auxiliary



You prototype your concept on a small scale quickly and inexpensively...

machine, an activity audit trail, auto-cleanup and timed events — hundreds of special features designed to make your life as Sysop a **success**.

But that's just the beginning...

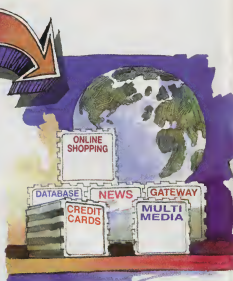
Expand Your Horizons

Next, you can integrate a wide array of add-on options. Installation is as easy as "A:INSTALL". The Major BBS takes full advantage of **DLL technology** to dynamically link these features into your system.

For instance, Fax/Online lets you provide outgoing fax-mail and fax database services to your users. *Search and Retrieve* gives you a full document database, with support for graphics files and fax attachments. And **Internet** mail and newsgroups can pipe right in with the *Major Gateway/Internet* package.

Other DLL extensions available from Galaticomm include *Shopping Mall*, *The Major Database*, *Entertainment Collection*, *Dial-Out*, and a special version of the RIPaint GUI design tool.

Use the Menu Tree designer to place these new options in the most convenient location. **Full security control** lets you decide which users will have access.



You smoothly integrate multi-user applications as you need them...

And because these DLLs are written in C and Assembly, they provide far greater **performance and flexibility** than script languages or xBASE derivatives.

You Need It? You Got It...

Over 150 independent software vendors offer a wealth of products you can cleanly add to your system as DLLs. Plug in software such as:

- multimedia document servers
- MLS photograph databases
- credit card verifiers
- FIDO, QWK, RIME mail support
- online bidding networks
- employment classifieds
- 1-900 payment and tracking
- interactive multiplayer games
- worldwide "chat" networks
- automatic call-back verifiers
- contact management databases
- alternate user languages
- photograph dating services
- online purchasing systems
- satellite news delivery
- remote management tools
- and much, much more...

Each of these products integrates directly into your system, taking full advantage of our **open architecture** and

We just provide the tools.



As you grow, you add more lines, hook up your LAN, connect to the Internet...

And you experience the success of your own, unique online service.

multi-user environment. No other BBS platform gives you this power.

"Doors" even let you interface to client/server databases and other DOS applications, as well as the programs written for multi-node BBSes.

With the Freedom to Grow

As your system takes off, you can add **more lines without the headaches** of multitaskers or stacks of computers. Simply add *User Six-Pack* licenses and hook up more modems.

ONLY THE MAJOR BBS GIVES YOU THE POWER TO SUPPORT OVER 100 SIMULTANEOUS HIGH-SPEED USERS ON ONE PENTIUM-CLASS MACHINE.

In performance tests reported by *Boardwatch Magazine*, The Major BBS handled **104 simultaneous file transfers** at 14.4 modem rates (1750 cps), and over 64 at 28.8 modem speeds (3300 cps). In most real world cases, even more simultaneous users are possible.

You can use multiport hardware such as the GalactiBoard and GalactiBox to easily **manage huge numbers** of internal and external modems. (Galacticomm is the only BBS manufacturer with multi-

user **hardware design experience.** The Major BBS also works smoothly with non-intelligent hardware by vendors such as DigiBoard and Boca Branch.

And Connectivity For All

Only The Major BBS gives you the ability to support modems, serial connections, IPX/SPX LAN channels, direct X.25 circuits, and TCP/IP sessions — all on one computer. Each channel group can have different menu branches and security controls, at your option.

The *Advanced LAN Option* lets you create a bank of channels that will dynamically accept calls from computers around your office — directly through your **Novell LAN.**

You can also provide **national and international** access at low cost via the *X.25 Software Option* and a PC XNet card — you avoid the inefficiencies and expense of a PAD.

And our new *Internet Connectivity Option* lets you integrate a **TCP/IP stack** directly into your BBS. You don't need a separate machine to provide telnet in, telnet out, FTP client, and FTP server features to your users. Anonymous FTP and Internet surcharges are also supported.

A Bright Future Awaits You

There are few limits to what you can accomplish with The Major BBS. The full **C source code** to the BBS is available, to give you the ultimate flexibility. Write your own add-on options, or tweak a particular function to your exact needs.

And to address the needs of very high-end applications, Galacticomm has launched a **UNIX technology** division to provide The Major BBS platform for minicomputers to supercomputers.

Integrated solutions, consulting, and custom development are available from Ambassador dealers worldwide. **World-class support** is available to you via voice, fax, BBS, CompuServe, and the Internet. A quarterly magazine called *The Major News* provides you tips and tricks, as well as a **resource** for third-party products and services. And regular software improvements bring you the latest in online technology.

For more information, give us a call at 1-800-328-1128 (or 305-583-5990 outside the U.S. and Canada). And let's turn your visions into **reality.**

GALACTICOMM

BOARDWATCH MAGAZINE

Guide to Electronic Bulletin Boards and The Internet

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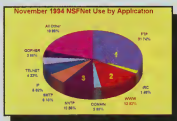
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Power.

When your BBS succeeds, you'll need the power to back it up – and you won't want to buy a room full of computers to get it. For years, TBBS has stood alone at the top of the power curve in

BBS software. It still does. To prove it, we put all types of BBS software in a room and tested them. As the graph on the left shows, the closest competitor can't deliver half the speed and power of TBBS 2.3. To complement its speed and power,

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Speed.

budget or your sanity. And TBBS is backed by eSoft – the company with the most computer communications knowledge and expertise in the industry. You can buy 64 user TBBS 2.3 for \$1,995 (*32 user for \$1,495, 16 user for \$895, and 4 user*

for \$295). When you're ready for the only BBS

product that can truly deliver reliable online

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LAN access and

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- ▲ In addition to complete documentation, TBBS comes with a 40 minute installation video tape.
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EDITOR'S NOTES

THE FIRST SHALL BE LAST, AND THE LAST FIRST...

In addition to the slew of new books covering the Internet and the online community as a whole, there are also a new bevy of latecomers to the scene to introduce magazines and periodicals offering coverage of the Internet, the Information Superhighway, and the online community. And in a kind of profound, far reaching, and very public display of ignorance, several have had the temerity to proclaim themselves **FIRST** on the scene. It rather leaves the rest of us with the same undoubtedly mixed emotions Native Americans felt after having been "discovered" by Columbus. It's good to be "discovered" - isn't it?

In publishing Boardwatch Magazine, from the beginning we found the landscape to be rather broad online, and in some respects among print publishers we did feel a bit like the only savages on the buffalo hunt. To try to illustrate the online milieu and inform callers and users of the panoply of services available by providing descriptions of a handful of them in each issue has always seemed a little limp to me. The analogy I've always used is that it is rather like chiseling paint chips from the side of an aircraft carrier and walking around showing them to people with the story "this is what a navy looks like - just picture it as much bigger." The paint chips are quite genuine, and yes it is bigger, but have we accurately conveyed the picture?

So in many ways, I'm actually very pleased there ARE other publications coming online to cover the Internet quite specifically. It is enormous - not nearly as enormous as widely claimed, but enormous none the less. And it is growing phenomenally. There could easily be twenty monthlies and a couple of weeklies covering this and still miss MOST of it.

But there is a certain disingenuous nature to some of the claims of new entrants in the field that must be addressed. First, there seems to be

some effort to fence Boardwatch into the "oh, they just cover bulletin boards" or they are for "BBS operators" niche. This displays a rather wholesale ignorance of what bulletin boards or BBS operators are from the get go. We'll have to let them get their education there the hard way. But as importantly, it has never been entirely true. We have covered in some depth large commercial services such as Trintex and its conversion to Prodigy for example going back enough years that no one at these new publications even knows that there WAS a Trintex. We've covered the entire rise and fall of the concept of RBOC gateway services and the slaughter of information providers engendered thereby, after predicting the same at the start. We've covered satellite data communications, the laying of fiber optic cable across oceans, and most of the large commercial services - some from their beginnings. We also cover shareware software, terminal programs, fax technology, modem and other hardware developments, and the occasional odd hat. Boardwatch has always been about using personal computers to communicate rather than calculate, and it has covered this from the grass roots perspective of how to do it inexpensively and usefully. At the time of our first issue, in March of 1987, this was a fairly avant garde concept - though not quite original even then. Today, with a move in PC communications quite into the mainstream, it seems quaint. But I would like to think that at least in some small measure, our efforts have played a role in getting it there.

Similarly, and for the record, our first story that covered the Internet in a useful way was April, 1989, in a story about Dartmouth College's online service covering Dante's Divine Comedy, we described e-mail and telnet access to the service. To put this in perspective, the telnet address was entirely numeric and the network was ARPAnet. Domain Name Service was not even universally deployed at the time. By 1990, ten of our twelve issues contained Internet coverage. And it has been continuous in ALL issues of Boardwatch Magazine since then. So the concept of a NetGuide or Internet

World or a Wired Magazine laying claim to a **FIRST** in this field is demonstrably preposterous. And in at least two of those cases, known to be preposterous by the editors as THEY were reading Boardwatch at the time.

In fact, WE would be very hesitant to make such a claim ourselves. Most of what we can all see in an evolving industry such as this is quite because we stand on the shoulders of the giants who preceded us. You might find it interesting to note that our own current Prodigy columnist, Ric Manning, edited a BBS newsletter several years prior to Boardwatch titled PLUMB that was actually very well received - the market was just a lot smaller then. And I myself have contributed to a quarterly publication titled ONLINE, edited by Nancy Garmen, that is still in print today serving research librarians and information researchers. If its Internet coverage does not clearly predate ours, and it may, it was certainly contemporaneous in such focus. And despite a heritage reaching back to the late 1960s, the Internet as we know it really wasn't particularly useful to the grass roots prior to that period.

So to our new brethren in publications covering the Internet, the Information Superhighway, or a rose by any other name, we welcome you to the field, hope for your success, and do look for new and interesting insights from your writers, editors, and contributors. But if your success depends on being first, you lose. You can't be first. You can't have invented it. And you'll just have to carve out a place through hard work and excellence instead. We predate you as a publication by eight years and in Internet coverage by five years, and we had to as well.

So too with books. Almost all of them are "firsts" with regards to the Internet. The first book on the topic we encountered was John Quarterman's THE MATRIX. And glad we were to have it as I recall. And we just don't receive any press releases anymore that aren't "firsts" one way or another. I keep looking for one that touts being "second" to establish the trend, but none show up. Some of them claim

firsts on things that were discarded as stupid and potentially dangerous some fifteen years ago. We do hope they have somehow grown to be better and safer ideas between then and now.

That said, genuine confusion, aside from the intentionally disingenuous, is almost becoming a way of life. MCI's introduction as a NEW Internet Service Provider is almost a reverse claim. They are not only new, but also among the first. MCI partnered with IBM to form Advanced Network and Services (ANS), to build the T1 and later T3 backbone under the National Science Foundation contract to Merit in 1989. And we find the introduction of this player into Internet services most notable. Sprint has rather had its way over the past year by providing Internet connections rather widely, and most notably without the restrictions on resale that the smaller providers such as UUNET, PSI, and others seemed to desperately desire as a barrier to entry for the even smaller fry in the food chain. The result has been a wholesale shift of Internet connections to Sprint - to the point where the danger of Internet control and ownership by one major player loomed large. From our perspective - treacherous waters.

By all accounts Sprint has exhibited splendid behavior thus far. But a counterpoint to Sprint would be very timely, and given the huge number of connections they are putting in place, few have the knowledge, resources, and desire to pose an effective counterpoint. MCI does. They have a strong network, strong networking skills, in the past year they have very nearly gutted other companies of knowledgeable managers almost wholesale. The Gramercy Press advertising blitz actually does as good a job of conveying the what and the why of connecting to the Internet as anything we've yet seen, and it is coupled with a similarly cunning Web site to weld the claim to wire. Presenting this story in a brief tv commercial is actually nearly impossible, and they have done it persuasively. Enough so that significant numbers of commercial watchers and web visitors think Gramercy Press IS a real publishing company.

MCI's story about SMDS and ATM and a 1995 upgrade to 155 Mbps may all be smoke at this point, but it is the kind of aromatic smoke we like to both experiment with AND inhale. And finally, the selection of the Netscape Navigator, and offering the SLIP/PPP accounts at a fairly modest \$3 per hour locally in 28 cities or \$7 hourly on a national basis strikes us as a bold move. I would like

to think they know what they've done and are prepared for the onslaught. It is almost too much to hope for and we would probably have to predict they will be buried under the weight of the bodies at the door. But should they survive it, it could well open up access to the unwashed and at times rural masses.

And among the firsts this month, Hayes Microcomputer Products, Inc., who developed the first modems you could control by keyboard commands and software, and were among the first to address the use of modems with personal computers, is apparently among the first of the major modem manufacturers to file Chapter 11 bankruptcy. As best we can tell, business is booming for Hayes and they simply ran out of cash in the face of demand for their product. Piles of parts. Piles of modem orders. No money. I don't think this is actually an isolated case. Some of the large commercial online services are in hysteria to redesign their systems to get firmly on the highway, with historically thin margins and in the face of exploding demand. AOL has dropped e-mail all over the floor, issued a historic number of busy signals, and is still growing - making less money at it with every new call. They've bought ANS, an Internetworking company essentially gutted of talent over the past year, and Bookline, a promising Mosaic Browser - hoping not to be left behind. We'll see. CompuServe has bought themselves an Internetworking company, and so has Prodigy. It's a feeding frenzy. Most of these companies with the exception of ANS are tiny, hardly a year old, and unlikely to be particularly helpful in my unqualified but nonetheless strongly held opinion.

While inevitably, the sage comment is that these are the kind of problems to have, note that they still are problems. And most of these companies, with more business than they can handle, are nonetheless in a real fighting spirit for market share. The greed is palpable. And for some, I fear a poor end.

This is our first issue of the new year of 1995, actually our 9th calendar year of publication. And we continue to cover PC communications where and how found. In this issue we feature a tiny BBS in Texas using Waffle BBS software on three lines that caters to Pagans, we list some 287 BBSs available nationwide providing health and medical information, continue to cover existing online commercial services such as Prodigy, Delphi, and others, NEW entrants such as MCI with their internetMCI and Marketplace, offer a

few news items on hardware, a largish new section on Web features we call WebWatch - including startling graphic images of the solar system, weather maps, and telerobotic arms and cameras you can control from a keyboard a continent or two away, a shareware program allowing you to do voice over the Internet, and even show you what the people who are building the information superhighway themselves drive to work. We cover yarn shipments to Bosnia and the horrors of House Bill 4922. Lance Rose finds it noisy. John Dvorak finds it sinful. Charlie Moore is just trying to find it. And I've found it but can't figure out what the hell it is - or more importantly what it will become.

Notably, we're not the first. I'd like to think we're the best, but I don't even think that way most days. As editor, my job is to agonize over where we fall short, not where we look good. I do think if we can improve it a little bit in February over this January issue, and improve that a little more in March, and continue that trend for a certain serial number of consecutive months, whether it be in the first nine years or the first hundred and nine, sooner or later we win. And so do our readers, our advertisers, and our newsstand distributors.

That's what we do. That's all we do. And we do it all day every day. If you want to do it too, you can and welcome. But I haven't found being FIRST to be that much of an advantage. And I guess I don't think it counts for much. In fact, I'd rather be last - the last one left when the smoke clears. So we're going to allow all conflicting claims as to who is the first, and claim the position as being the LAST magazine to cover electronic bulletin boards, online services, the Internet, the World Wide Web, and any other PC communications issue that we think matters. Yeah, I like that. Boardwatch - the LAST magazine you ever want to read...

May we all live in interesting times.

Jack Rickard
Editor, Rotundus





Letters to the Editor

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LETTERS TO THE EDITOR

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COST OF LEGISLATIVE INFO

Dear Jack:

On page 82 of the November issue, there is an article by Jim Warren, "Access to Government," describing how he used the Internet to force legislation in California that made California's legislative information available on the Internet for free — no charges except for whatever connection charges the individual caller/user might be paying for general Internet access. Bravo!

On page 63 of the November issue, there is an article (notice), "Government Printing Office Puts Congressional Bills on Line," that describes how you can get federal government legislative information from the Internet for \$375 per year. It seems to me that we need to do the same job on the Federal Government that has been done in the State of California.

What isn't said is that (at least for the Congressional Record) you "must" do a database search using the search engine that the GPO provides (something new to learn). You are not allowed to simply download the entire Congressional Record for a given date (thereby to search and browse it using your own searching/ browsing/indexing engine on your own computer. If that were possible, the day's download could be done automatically in the background, and the searching could be done automatically (at least on ASCII files) using Gopher or some more sophisticated searching/indexing engine, minimizing connect time and operator time. (The foregoing is a report from someone I know who has a Congressional Record account. I don't have an account myself.)

Thanks for your excellent magazine, which I subscribe to at home. Please forgive me for not responding to your recent solicitation addressed to me at work.

Sincerely,

Fred Holmes
From: FRED.HOLMES@HIS.COM

FREDERICK S. HOLMES, JR.
7323 MASONVILLE DR
ANNANDALE VA 22003-1637

Fred:

The Government Printing Office, in conjunction with the Depository Library Program, has set up two Internet sites to access all published forms of Senate and House Bills from the 103rd Congress, the Congressional Record and Index for 1994, and the Federal Register for 1994.

The two services providing access to the GPO information at no charge are the Columbia Online Information Network and the Seattle Public Library.

To access GPO information on the Columbia Online Information Network, telnet to 128.206.1.3 and login as guest. On the main menu, select item 5 Government Center, then 2 Access the Government Center, 4 United States of America, and 1 GPO Access.

To access GPO information on the Seattle Public Library, telnet 198.137.188.2 and login as library. You will be prompted for a terminal emulation (VT100 works), and select item 14 from the menu for Internet & Seattle Community Net; 1 Internet & Seattle Community Network, 3 Govt. Prt. Off. Online Access Service, and c for connect.

Questions about the GPO service can be addressed to help@eids05.eids.gpo.gov or call (202)512-1530.

I agree all is not well in government information online - which rather leads us to having Jim Warren's column in Boardwatch. But frankly I am on cloud nine these days anyway. Neut Gingrich addressed the Washington Research Group in November and listed his top five items. One of them, incredibly, was to file ALL House documents electronically in an effort to equalize the access to information between the citizens in the hinterland and the moneyed lobbyists in Washington. He sounded dead serious about it.

Jack Rickard

NIST TIME CLOCK

A few months ago your magazine had an article that gave the Internet address of the NIST time clock in Colorado. Unfortunately, I've misplaced that issue and have recently found I have a need for the address. If you

could give it to me, I would greatly appreciate it!

RS
rsmcg@delphi.com

RS:

Actually it was about a year ago - November '93 issue actually with a largish article on the topic. Isn't it amazing how time flies. Anyway, the NIST server is at time_a.freq.bldrdoc.gov or 132.163.135.130. You can get a quick time fix with a telnet to 132.163.135.130 port 13. You can also ftp to 132.163.135.130 to pick up software to use with the Network Time Protocol (NTP). You can address e-mail to time@time_a.timefreq.bldrdoc.gov, or by contacting Judah Levine, Network Time Service, Time and Frequency Division, National Institute of Standards and Technology, 325 Broadway, Boulder, CO 80503; (303)497-3903 voice. They also maintain a dialup data service providing time fixes and titled the Automated Computer Time Service or ACTS at (303)494-4774 at 1200 bps.

JR

ALASKA TRAVEL

Dear Jack

First the obligatory Kudos... I have been a subscriber for a couple years now. Great magazine! I always look forward to each issue, regardless of how late it may be. Next to Letters to the Editor & INMO I especially like Lance Rose's legally online column. I'd also like to mention that I get calls to my BBS from my ad in your BIG List section. An outstanding value in advertising, especially for a shoe string operation like mine.

The point of my writing you is this. I run a BBS which specializes in Alaska Travel Information. I am also a list keeper of Travel Related BBSs as noted in your list of List Keepers. I am trying to contact as many Travel BBSs as possible. What I am proposing is an International referral system of Travel BBSs. Something along the lines of a listing on each board describing the specialties of other Travel BBSs. To date, the boards I have contacted have been pretty specialized ie...geographically specific or type

of travel, activity, etc... Listing each other wouldn't seem to be any serious conflict. Any competition generated should be offset by the added responses from wider exposure. Of course once a caller contacts your board it would then be up to you to provide the best service.

I am hoping that you will find this letter worth posting in BW. If other sysops of travel BBSs want to be included on the list please contact me. I would really like suggestions on how to go about organizing an international referral system.

Thanks, Keep up the good work !

Bob Southwick
Sysop - Alaska Information Cache 907-373-3205
wlsysop-aic@society.com

Bob:

Sounds like a travel plan to me Bob. Go for it.

Jack Rickard

Hello Mr. Rickard...

I find the magazine informative and your writing to the point and often quite funny. The letter to the Amway guy brought back some horrific memories. I spent nearly \$1000 back in the early 80's before I woke up and told my ever supportive, Mr. You-Can-Do-It "sponsor" to go blow a monkey. I readily agree with your opinions on communications issues, especially government intrusion into the BBS world. Land of the free? <NOT> In short, keep writing and distributing your wisdom so the rest of us won't feel like the minority we are rapidly becoming.

I came to Greeley in July to create a BBS for UNC Admissions. Actually, the BBS was already there, but rather non-effective and crash-prone. I'm still working on it, but progress is made and we should have a fully automated application facility before the end of the month.

The BBS operates on Remote Access 2.0, 2 lines. Here are the numbers if you ever get bored enough to call...

1-800-352-1862 and 1-303-351-1862

I'm going to exploit that 1-800 connection for all it's worth to bolster UNC's online image and generate those big admissions numbers...

If you have any suggestions for a photo database application that would allow pictures of the campus and descriptive text, please advise...

Also, can you tell me how, when, where, etc. for the next BBS conference? I'm hoping to get UNC to foot the bill for my attendance,

after I've worked a few digital miracles for the department.

Thanks for your time,
H. Brent Kitchens
Sysop, UNC ACCESS

Mr. Kitchens:

I'm rather big on web servers these days with regards to graphics and information about colleges particularly. ONE BBSCON will be held August 16-20, 1995, in Tampa, Florida. More to come.

Jack Rickard

Jack Rickard

I was recently lurking during an interminable debate-cum-flame war over Zoom modem quality, and then started reading "Letters" in the Nov. issue. After reading about your Hummer (ever consider writing for "Car & Driver"?), I ran across a note and reply about Zooms.

I thought that was ironic, and I opened a QWK in order to insert a quote from you (the last paragraph, in fact). While scanning the messages, I noticed that I had been beaten to the punch. Not once, but FOUR times.

What I thought was funny is that Boardwatch was not mentioned, but your name was plastered everywhere. Some guy with a sense of humor even wrote, "Jack Rickard says" in big ASCII letters.

Out of curiosity, I monitored and kept QWK packets for six days from every board I frequent. During that time, Boardwatch was mentioned a couple times (mostly recommendations), and your name was mentioned about three or four times for every mention of the magazine.

I don't know, objectively, what — if anything — Boardwatch has done for the industry, the hobby, or whatever, but it's an informative magazine, which is all I ask. At \$4.95 a pop, it's the least you can do. But I've come to the conclusion that Boardwatch per se doesn't matter much. Within your turf, even Dvorak has taken a bit of a back seat to you (which is fine; I have a lot of respect for Dvorak, but he's started yammering lately, instead of informing). It's Jack Rickard that matters. Even if that isn't true, that is the perception.

You might not care, but I thought it was interesting. Reminds me of the song, "Cult of Personality" by Living Color.

Thanks for the magazine. I enjoy it.

furi@the-matrix.com

Furi:

Thanks for the kudos. I fear the perception

may be a bit overwrought. It is quite normal to quote columnists rather than titles in such discussion. But if we've brought any relevance to the discussion, well and good enough. I've been a bit of a fan of John C.'s since 1981, and I've watched the trail grow weary with the drying carcasses of those that ignored his yammering. We're very pleased to have him with us in these pages.

Most magazines are published by large organizations. We're a bit unusual in that I started Boardwatch eight years ago and still publish it today. I get a little confused where Boardwatch ends and I begin myself some days.

But one of the delights in writing for this audience is that they tend to be a bit independent. We don't do cults.

Jack Rickard

Jack:

With all the big commercial providers out there competing for the users time and money, with their fancy front ends and many services, where does this leave the local BBS? There seems to be more and more providers coming on-line every day (Cripes, even the phone companies are getting into the act!). What do you think the future of the local BBS and the BBS industry will be?

Thanks for your time

Mike Riffe

MAIRFFEY@delphi.com
Mike_Riffe@fc1.gln.org

Mike:

It's kind of like Yogi Berra said: "Nobody goes there anymore - it's too crowded."

Something like that...?

Jack Rickard

Hi, Jack. I've subscribed to Boardwatch for years and watched it turn from a general-interest magazine for the telecom community into something close to a house organ for sysops; though not a sysop I still enjoy it.

(Sysops to me are like doctors: I'd never want to be one but I'm glad SOMEBODY does!)

Speaking of doctors, I think you almost got it right about medical care costs and insurance in your response to a letter in the October 1994 issue. Of course a commodity that "somebody else pays for" will become more expensive as the consumers are insulated from the distasteful process of paying for it — ask anyone with an expense account where they eat when the company or the

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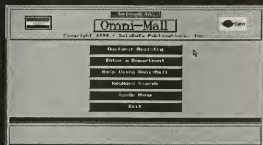


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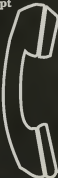
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client is footing the bill versus when they have to cough up the money themselves — and third party payors are therefore to blame for the outlandish inflation in medical care costs.

But your proposal to "make it illegal to insure medical expenses" is both cruel and unnecessary.

The widespread phenomenon of health insurance paid by employers is an artifact of (surprise!) governmental meddling, as of course is the practice of "somebody else" — you and me — paying for virtually all medical care for the elderly (a group that's wealthier than the non-elderly but that tends to show up at the polls reliably and re-elect whoever gave them the most goodies).

Wage controls enacted during world war II forced employers to compete by non-wage benefits for labor. Medical insurance (tax-deductible, just in case anyone missed the point) was one of the principal benefits available. That's why strapping, healthy 25 year olds get the "benefit" of something they're not likely to need or use significantly for another 20 years, like it or not. And that's the reason why adding a child — ANOTHER WHOLE PERSON — to a typical policy costs just another few dollars instead of double the single premium.

Thus the dead hand of government control is responsible not just for the visible evils, I mean benefits, of Medicare for the old and Medicaid for the poor, but indirectly for the immensely costly "benefit" of employer paid health insurance for most of the rest of us.

I submit that insurance, privately and voluntarily contracted, is a perfectly rational and beneficial, certainly not destructive, means of dealing with great risk, be it a shipwreck or a heart transplant. Rather than banning its use for medical expenses, I propose that its pervasive presence as a government-mandated transfer of wealth (from poor to rich, in medicare, or vice versa, in medicaid, equally repellent) and as a governmentally encouraged "benefit" in the form of tax-exempt compensation to employees, be removed. If fewer people were insured, more would pay attention to the cost of medical care, as you state. But the solution to a governmentally-imposed mess (i.e., most messes, and all of the very worst ones) is NEVER another governmental action, as I suspect you know but too few others grasp. It's far better to reverse the first mistake than to compound it with another, as a general principle and in this specific instance.

Rather than a grinch, forbidding something to those who want it, wouldn't you rather simply remove it from those who don't? Makes sense to me; unfortunately neither you nor I is running for elective office....

Keep fighting the good fight, Jack. I'm in the process of trying to convince a very thoughtful man who publishes an anarchist magazine that going online would be more productive than carping at length about the difficulty of reaching an audience with an "alternative" publication. Regrettably he has an aversion to any technology newer than 30-40 years old and thinks the ISBN for books, with its UPC-like OCR lines, is some kind of evidence of a hideous conspiracy to suppress the nonconformist "press" and its \$110 cost, incurred by the company that runs the system, is prohibitive and affordable, by design, only to large corporations. If I could only drag him near Usenet for an hour I'm sure he'd get the point, but he's apparently committed to a lifetime behind a Justewriter letterpress machine, bitterly complaining that nobody reads his output, convinced that it's someone else's fault.

The ironic punch line is, of course, that the online community in 1994 may well be the most anarchic bunch of people in history, and by the simple expedient of overcoming a silly phobia he could be a real voice, just as he claims he wants to be. I guess phobias are stronger than logic. Eek, I see a spider—gotta run <g>!

Best,

Jonathan Rasmussen
id5011@ibbswest.com

Jonathan:

I will take strong note of your comment that we have become a house organ for BBS operators. Perhaps we do lean a little too strongly in that direction. My view has been that the difference between BBS callers and BBS operators is that one of them just doesn't ever want to hang up the phone. But our mission is as advocate for grass roots communications using personal computers at the least expense - for whomever that applies to.

As to insurance, it is basically a private form of socialization. It offers all the advantages and disadvantages of socialism, but in optional form. When it comes to health care, it is not really as optional as it at first appears. And if the government gets in the business, it is just socialism. The result is generally a broken system that consumes huge resources, and doesn't produce very much. I indicated that what I proposed would fix it. It would. It is not necessarily the optimum solution all things considered. But it would fix it if that's the mission.

There are many changes in our society and economy driven by technological changes, and many people are being displaced in the process. Those who adapt will thrive. Those who don't won't. This goes to the heart of life in the universe, and I neither rail against it nor propose that we fix it. Your

friend, like all of us, can lead, follow or get the hell out of the way. Anyone publishing an anarchist magazine should understand the basic concept of that I would think.

Jack Richard

When I began calling bulletin board systems, it was using a TRS-80 MODEL 1 with a 300 baud modem you dialed by hand, and listened for the carrier on the other end. Actually we were pushing the envelope then and got our modems up to about 600 baud as I recall. BBS' had a couple of floppy drives and were online all night. This was GREAT! Now some of you are probably gasping at this idea, but this is the way it was, back in the days when I first found the joys of a modem.

Now we have 28.8k modems, T1 Internet connections, CIX civil wars, and Gig's galore around the world. Well; we've come a long ways. Yet in my MANY many years calling bulletin boards, and running my own off and on, I have come to realize one fact. No matter what type of computer, no matter what type of software, and no matter what type of BBS, there will always be some unconfident post-pubescent child online with nothing better to do than harass anyone who comes within screenshot of him. What happened to these kids? They get picked on too much in school or what? I don't think SysOp's do enough to squelch these type of users, and I have been seeing it for too long. I suppose if I were inclined to, I could enter a battle of wits with these under-experienced toddlers, but frankly I don't have enough time online as it is!

So, from a user with more experience than I care to think about, I ask all System Operator's out there to PLEASE control their users, who can not seem to control themselves.

An Anonymous User
Salem, MA

(I have decided to remain silent no longer, and you will probably hear a lot more from me in the future...you have my sympathies!)

Dear Anonymous User:

A rather dark view. It is true that a certain element of those online can be a pain upon us all. I myself wrestle with the concept of a free and open discussion area without moderation or restriction. This should be a doable thing. But repeatedly I see groups containing several hundred correspondents, that operate beautifully, but can be utterly destroyed by one or two lone rangers with an attitude and an overactive keyboard. And by destroyed I mean made USELESS for everyone else. But the efforts I've seen at heavily moderated conferences do not indicate your solution of having sysops control their users holds much promise either.

There is a model for public communication that would work very well. I just don't know what it is yet, and haven't found it online to this date. I think it traces to problems beyond the online milieu. We have in-person meetings often with these ridiculous Robert's Rules of Order and so forth for the same reason. A handful of people can disrupt a meeting quite totally - rendering it useless. So there is a very rigid protocol for speaking at such meetings. Ultimately, I guess I think we'll develop similar protocols for online communications, but would love to discover something new and different that addresses the problem more usefully.

Jack Rickard

Could you help me decide whether I should buy a 14.4 or 28.8 modem. I have been using modems a little more than a year and I am planning to upgrade. My friends have been telling me to buy a 14.4 but a 28.8 sound a lot better because it is twice as fast and it only cost around 60 bucks more than a 14.4. Please tell me what you think. I was also wondering if you know anything about USR Sporter modems 14.4 or 28.8? Are they any good? And also what is the difference between v.fast and v.34?

-=Bob Tahoe=-

Bob:

I think you should buy a 28.8 kbps V.34 modem. The technical difference between V.fast and V.34 centers largely around a V.8 handshaking sequence that I have had explained to me at least three times by people who should know, and I remain underwhelmed. But more importantly, V.fast is a proprietary standard that some modems support. V.34 is the approved International Telecommunications Union standard for modem communications at 28.8 kbps and very shortly ALL modems of any manufacture will support it so that is the one you want.

The performance difference between 28.8 kbps and 14.4 kbps is dramatic, and what we refer to as perceptually threshold - it crosses one of those magic points where you FEEL very different online. Dennis Hayes essentially spiked the price of 28.8 kbps modems at introduction - a great boon to online communications if not a particularly profitable one for the modem manufacturers. As a result, the price differential between 14.4 kbps modems and 28.8 kbps modems is almost comically negligible. It's a no-brainer at this point Bob. Find a good 28.8 kbps modem, pay for it, and move on.

Jack Rickard

Dear Mr. Rickard,

First off I want to thank you for the Oct '94 review of COMt in your magazine. Since then I have been inundated with inquiries. I not could have asked for a more positive review of the product!

One thing that you neglected to mention in the review is where people can get COMt (this is the most commonly asked question to date). COMt is indeed shareware, and can be had either from the IBMCOM forum of CompuServe, or via anonymous-ftp to <ftp.std.com/customers/software/rdmalm/comt.zip>. If you could please pass this on to your readers I would greatly appreciate it, as it might slow down some of the more redundant inquiries.

I'd also like to mention that I prefer inquiries be made through email (either yon@world.std.com which is my Internet address, or 73017,1375 which is my CompuServe address). I can assure that everyone who emails me gets a prompt response, usually within a few hours. If it is absolutely necessary to speak with me over the phone, I kindly ask that calls be restricted to business hours Eastern Time, as the phone number given in the article is my home number.

For those who may have had difficulties using COMt in conjunction with Telix for Windows, I've recently released version 1.03 of COMt which should fix this. It also improves the error-reporting when the Telnet connection does not go through, so it is worth upgrading if you have already obtained version 1.02.

Thanks again!

David Yon
Performance Designs
YON@WORLD.STD.COM

David:

Thank YOU for one of the most seriously useful utilities we've seen on the way to Internetville. You and your compiler should be classified as a deadly weapon. Please keep us apprised of future efforts on any front.

Jack Rickard

In your October 1994 issue Jim Thompson sings fairly high praises for a computer manufacturer named Gateway 2000. One line in his article I have to disagree with: "Gateway is also consistently ranked among the very best when it comes to customer service and support..." Perhaps because you are a publisher you get special treatment when you call them? However, my experience has been one of endless frustrations. The most annoying? Having to wait what seems like forever to simply get through to a technical support technician. I have a lot of commercial software on my computer and so have spent my fair share of time in technical support wait queues, but Gateway 2000 tops them all!

I think it was in a previous editorial that you spoke about receiving a P5-60 or P5-66 computer from Gateway 2000. In any event, the fact that the illustrious Boardwatch Magazine was using this kind of computer did not fall on deaf ears. I would say this was one of the major reasons I myself bought a P5-60 from them. Als how stupid of me. I of course could have told myself that Boardwatch Magazine has many computer users who know a lot more about these things than I do, and they are not in need of technical support technicians. They already know all the answers!

But the little guy like me... well, we look up to you for answers and perhaps a little bit of guidance. I wish I were the only person whom I know to complain about Gateway 2000. I wish my distress had been a little less consistent when dealing with them. So please tell me, who says they have the best customer support and why do you believe them?

Sincerely,

Piotr Jaginski
63 Pitt Street, #4R
New York, NY 10002-3525
amcan@pipeline.com

Piotr:

I'm responding on a Gateway 2000 P5-90 myself. It was purchased, not received for review, and is my personal machine. I replaced the keyboard with a Northgate OmniKey102 which I prefer. Beyond that, it is quite stock, and I have grown very fond of these machines. We have had to call them a couple of times, and the tech support lines are not particularly sensitive to who you are. We use their normal tech support lines. They are selling a LOT of machines, and it IS occasionally hard to get through. We've found them fairly knowledgeable when we did finally get through. One of the anomalies of purchasing computers is if you can find a vendor that has empty lines waiting, it is usually because they don't sell much, and there is usually a reason for THAT too. In any event, I like the Gateway product line overall, and the P5-90 is a killer box. I note that a lot of BBS operators are going to this machine for performance. We have no connection to these people at all, I don't even know who they are. The gentleman I talked to when ordering it seemed exceptionally knowledgeable and even personable and I like the machine.

Jack Rickard

Dear Editor,

I recently read a .wri file for Windows 3.1 on Excalibur BBS. The author of the BBS program claims he can run 8-lines. Isn't that pretty unusual??? I mean Excalibur uses Windows as a multi-tasker. I think Boardwatch should do an investigation on this? How about you?

NEW PCBoard Version 15.2 offers Internet Gateway, Full Credit Accounting, Windows E-mail, dBASE File Access, Internal QWK, FIDO Mailer and more sensational benefits, all as "standard equipment" the other guys make you pay through the nose for, or don't even offer... And now you can try PCBoard for FREE



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Steve Klingler,
VP/General Manager
Clark Development Co.

By Jim Ackerman

Why is PCBoard the most widely used BBS software on the market today... used by 23 of the top 100 boards, including Software Creations, voted top BBS the last two years... and the only commercial BBS software ever, to win *PC Magazine's* prestigious... *Editor's Choice Award*!

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Who wouldn't want these 8 essentials the competition considers options you must buy

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6 Now, unleash the power of dBASE III and Database Access, with on-line applications created with the award winning PCBoard Programming Language (PPLC).

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But wait... there's more

We've only scratched the surface. There's literally not enough space to cover it all here.

Like... you can use the same *newsgroup names* as the Internet on PCBoard because 15.2 supports conference names up to 60 characters long.

Save amazing amounts of time with our new, Automated, Rules-based File Maintenance Utility. Plus... local logs, 19 FREE PCBoard utilities, and even FREE support for MultiPort hardware, all "standard equipment" on PCBoard version 15.2.

How can they do all that... and without raising the price to boot

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And even with all of these new benefits, the price hasn't changed. Begin as small as one or 2 lines for \$150.00, and grow all you want. Only PCBoard supports up to 1,000+ dial-in or local access nodes.

It's the perfect solution for the I-line hobbyist to the Fortune 500 international corporate E-mail application.

Maybe that's why PCBoard has more installations than any other BBS system software.

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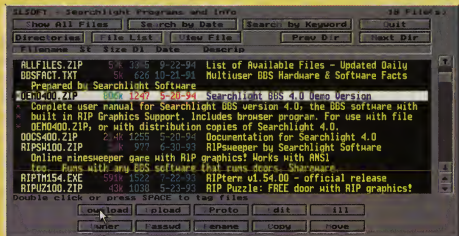
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Searchlight BBS...



Our RIP file manager lets you scroll anywhere in a directory...you can tag items and run commands by clicking with the mouse

When the first Bulletin Board Systems went online in 1978, graphical user interfaces didn't exist. Callers had to stare at text menus and memorize commands; there was no alternative.

Today, everyone prefers the dazzling screens that Windows and OS/2 provide...but most BBS programs still display the same drab, confusing text menus that the first programs did.

The information superhighway is full of exciting stops; no one has to call your BBS anymore. If they see cryptic text menus, they won't call back. You have to give callers the dazzling graphics and intuitive menus they prefer. That's why you need *Searchlight 4.0*.

RIP: We Show—Not Tell

The Remote Imaging Protocol by TeleGrafix gives callers the graphics and mouse support they expect; that's why callers prefer RIP. That's why BBS developers are scrambling to add RIP—and telling everyone that their RIP is "as good as Searchlight."

Well, talk is cheap—and seeing is believing. It's easy to see who the leader in RIP support is...look at our competition and keep asking: "Where's the RIP?"

Other companies love to tell you how good their RIP support is. But they hate to show it to you in their ads, brochures and test drives. They won't show you their RIP support because they know they can't match ours. Because nobody can.

The working scroll bars in *Searchlight 4.0* let you scroll through a message, file or directory list with your mouse. You can select messages, tag files, set options and run commands just by clicking with the mouse.

Searchlight 4.0 creates RIP menus on the fly, so you can build custom menus in seconds. And *Searchlight 4.0* is the only BBS program that displays RIP locally—so you see the same screens your callers do.

We do RIP better than anyone because we've been doing it longer than everyone. *Searchlight 3.0* was the world's first RIP-compatible BBS.

Searchlight 3.5 was the first BBS that generated RIP graphics—the first to offer scroll bars, pick lists and "on the fly" menus.

Searchlight 4.0 is the *only* BBS that displays local RIP. It's the *only* way to give callers a true GUI with no proprietary terminal.

And 90 days after TeleGrafix releases the RIP 2.0 protocol, we'll introduce *Searchlight 4.5*—the first BBS program that supports it.

"Searchlight is doing a marvelous job incorporating RIP into their BBS"

Boardwatch Magazine
July, 1994



Our direct video support lets you run any text-based DOS program as a door

you won't believe your GUIs!

Improvise Without Scripts

If you want custom menus, some companies make you buy their script language and write routines in it. That's not customizing—it's programming.

We think our engineers—not our sysops—should write the code. Our menu editor lets you put any command (we have over 100) on any menu. You can nest menus 40 levels deep and add doors to any menu—even build executable menus that run lists of commands.

Then use our RIP styles editor to add buttons and wallpaper—we'll generate your menus on the fly. Or use your favorite RIP painting program to draw RIP screens...and let us put your menus on it.

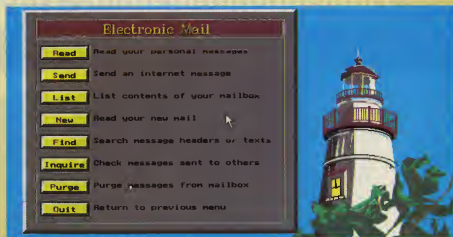
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**PC Magazine
June 14, 1994**

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BOA

I know Excalibur isn't Major BBS, TBBS, Wildcat, etc, but it claims to have some pretty NICE features. And if most of them are true, I would really think about buying it.

Also, has anyone or is anyone using Excalibur BBS? I would love to hear some opinions about it. Thanks.

Sincerely,

Bryan

Bryan:

I've got a little problem with the 8-line claim myself. We have looked at Excalibur, and even slotted it for review in Boardwatch each of the past three months. The interface is really extremely well done - one of the best efforts I've seen. The program lacks some basic BBS connectivity features that are probably necessary, and I don't know if we are still too early, or running a little late in covering this product. Since it is a kind of client/server model, they can connect a number of callers and more or less service them under Windows. We simply have not tested the 8-line claim under load, like with all callers downloading files, but I am similarly dubious. The problem is pretty much limited to their own grandiose claims though. There is plenty of room in the world for a BBS under Windows that would run two or three lines. And we do intend to set something up and review this product in the future.

Jack Rickard

Good morning, Jack!

As I promised yesterday, I'm writing to expand a bit on some of the things you said in your "Webulism" article, which I really enjoyed. If I had been given the task of summing up "the state of the industry" in two pages, I don't know how it could have been done better.

First, I should tell you a bit about my background, so you can get a feel for where I am coming from. My communications/computing background is quite extensive.

I retired early (like thousands of others) from US West. No, I wasn't offended that you called them that. They deserve it. Anyway, in my 18 years at "the phone co." I worked in just about every discipline they had, from climbing poles to building a 14-state network of UNIX computers. I'm experienced in wiring plant, transmission, switching, carrier, UNIX system administration, supervision and even labor relations(!) After retiring from USW, I ran a police 9-1-1 center for a year, which was a communications nightmare.

After that, I worked as Network Controller for the French communications company,

Schlumberger. Their NOC is where you see the satellite dishes just west of hwy 85 at Sedalia. Two years of working the 12-hour graveyard shift there, and I was ready for a REAL job. An interesting tie-in, is that they have recently been purchased by Cable & Wireless, and will be going into the PUBLIC network business.

18 months ago I moved over to MCI, and have never been happier! See Gordon Cook's "Frenzy" article for some background on what we are doing. BTW, I am NOT a good source for "MCI offerings" to the public. My area of responsibility parallels those, but I work with our INTERNAL networks. I'm just as anxious as you to see just what we'll offer to the public in our "internetMCI" product.

Enough background. Time for specifics.

I've got the web fever too. The stuff is addictive! It needs to evolve however, and I see it evolving in two directions initially:

1. The current, graphical web pages that we find so addictive. This is "the hook" and it's a magnificent one. It has it's problems with bandwidth and processor intensity.

2. A much more efficient text-based web for serious researchers. This is the only PRACTICAL solution for businesses, and will be the web that drives COSTS DOWN because it reduces connect time, network and processor load. Queries can be answered almost immediately, and IT CAN BE INTEGRATED INTO BACKGROUND BATCH PROCESSING, allowing it to be really useful to business or to anyone who needs specific, detailed raw information.

You mentioned "Mosaic and the Web are evolving" and went on to mention spawning off into a telnet session or and ftp session. I'd like to break out and address that specifically.

Last week I spoke with Marc Andreesen at Netscape Communications. You may be aware that Netscape (formerly Mosaic) will be providing the WWW services offered in internetMCI. I mentioned to Marc that while our PUBLIC offering is a Windows-based package, MCI "INTERNALLY" has switched entirely to OS/2, and that I have 16,000 internal clients running OS/2 (plus 420 running UNIX, and NONE running DOS/Windows). Many of us are already using IBM's WEB Explorer, that came bundled with Warp, and we prefer using the WEB Explorer because of it's multi-threaded features. (You can be downloading a file with FTP, exchanging mail, and working in your scheduler while waiting for a web-page to appear.) I asked if he was planning to offer Netscape in a multi-threaded OS/2 version. Marc said that they were SERIOUSLY considering an OS/2 version, but that WEB Explorer interfaces perfectly with the Netscape server software anyway. He implied (but didn't specifically state) that the need was already met by IBM with the

bundled WEB Explorer, and it would serve no purpose to duplicate their efforts. I went on to ask if the security features in Netscape (allowing MCI to offer a product known as "marketplaceMCI" for secure on-line shopping) would interface with WEB Explorer. Marc wasn't sure (and I haven't found out from IBM yet) but said that Netscape's security features have been placed in the public domain, and that IBM or anyone else was welcome to adopt them. He said that he hopes Netscape's security standards will be adopted as THE standard before Microsoft tries to upset the applecart with their own proprietary standards in late 1995 or 1996.

So, the WEB is indeed evolving, and there will be some painful experiences along the way, but given ACCESS and BANDWIDTH and STANDARDS, I have some real hope for the future.

ACCESS AND BANDWIDTH

I mentioned earlier that Schlumberger's network "SINET" was purchased by Cable & Wireless, and would offer access to the public. They already serve some 200 countries, and have working relationships with PTTs around the globe. So does MCI, and we've already announced "networkMCI Business" and "internetMCI" and "marketplaceMCI". More products will be offered over the next year. Other companies will be jumping into the fray, and the feeding frenzy will cause prices to drop and features to be enhanced.

On the bandwidth side, we're talking INTERNET, and all the networks will be tied together just like the nations power grid (that's a scary thought!). Since the networks will be "clouds" and will have millions of overlapping points, you subscribe to "a provider," whether it be a commercial provider or free access at a local university, and the entire network is yours to use. In any given session, your packets might go part way on MCI, part way on ATT, part way on Sprint and part way on private networks. It will be transparent to you, but the carriers will stat packet flow between networks and cross-charge one-another just as the power utilities "buy capacity" today. Thus, capacity can be considered a pool, and the limiting factors will be THE SIZE OF THE PIPE FROM YOUR KEYBOARD TO THE CLOUD AND THE COST OF ACCESS TO THE CLOUD.

Whew! I hope you're still awake, Jack. Perhaps another time, I'll tackle things like wireless networks. I'm a HAM Radio operator, and have been a provider on our international wireless network (AX.25 protocol) for about 15 years.

Keep up the good work!
Jim Flannery
0006142476@MCI.MAIL.COM

Jim:

A timely missive. And yes, I'm still awake. You paint a pretty persuasive picture. I really believe bandwidth is a temporary problem. The overcapacity in fiber in this country is starting to look gorgeous, and I expect some technology coming our way to make it actually ludicrous at the LDC level anyway. The actual charging mechanism to the end user remains a bit of a mystery to me. I would love to see flat-rate pipes top to bottom. Right now, the problem is indeed access. Most of even the fairly serious online aficionados in this country really don't have a good option to make the connection unless they happen to be in a geographically fortuitous location. I'm very pleased to see MCI enter the fray and they're doing a lot of the pieces of it very right.

I do find it interesting that MCI has gone to OS/2 internally. The new Warp version has taken some hits on installation and configuration, but kudos on the TCP/IP. I've not had a chance to play with it much yet. Windows 95 is humorously being referred to around here as Windows 9x.

Jack Richard

CONGRATS, CIX & WWW

Hi Jack,

Congrats on the November Issue. You are right on target with CIX. I have set up several Internet providers, both commercial & education over the years. I was approached to join CIX early on. When they emailed me the contracts I talked to the lady working the helpdesk. (I honestly have misplaced her name) I could not agree to the terms. It felt like they wanted to "overtake" the net. I agreed to the idea of agreeing to pass other members traffic but they also wanted us to "filter" the traffic of commercial non-members. This led to the problem of HOW. How in the world could you filter all other non-member commercial providers? How do you police who is a .com, .edu or for that matter a .org? And for that matter, they do not make a routing table big enough to filter that many IPs.

The other BIG problems was each member does not get to vote on each issue. You get to elect candidates to the board. Sounds like the mess in D.C. to me. So for our \$10k we agreed to pass other commercial IP, which we do because of good reason. Can you imagine the trouble we would put ourselves through if we told our users "Oh sorry AOL, CompuServe & that WWW site you want to because a few BIG providers didn't like Sprint Link selling IP at a fair price to other smaller providers.

Let Mr. Meckler have Bill Washburn. Meckler & his web is just another version of CIX.

I personally can not see how anyone would buy into the full CIX membership. I could never talk to Mr. Washburn about the problems with the agreement, but was told "If you don't join you will be sorry when Nov 1 gets here." Several of us thought this was the way the big guys were trying to get the little guys out of the way.

After saying this.. when I first came in contact the net, I thought "Wow now this is the way its suppose to be.. Everyone pitching in to provide more info to the rest of the net..this way it will grow exponentially" I still think this way with the death of the CIX agenda. We need to keep watch for future incarnations of CIX. (Are you listening Mr. Meckler)

- Michael Erwin -
mikee@access.mountain.net
http://www.mountain.net

Michael:

Two responses suggest themselves. First, November 1 came and went, and no one I've heard of can tell the difference - aside from the rather unmistakable but easily ignored sound of one CIX hand clapping. Second - wow, that IS how it's supposed to be. You weren't wrong in the least.

One of the delicious ironies of the online milieu that keeps me forever infatuated with this little world is that only those with an innate spirit of generosity, and some visceral understanding of why it is necessary, get to play in it in any profitable sense. The online community is really quite good at lauding those who bring it a rose with roses, and pricking the shit out of those who bring it a thorn. It may be that life is like that, but there is no microcosm that makes it so empirically demonstrable on any scale you wish to experiment with as the online community.

That does not mean that anything should or could be provided free of charge. But if your main end goal is to dig the last quarter out of the carpet, you can usually be found among those cleaning them, Bob Mahoney of Exec-PC, arguably one of the earliest profitable cottage industry BBS models, told me years ago that you have to have a more complex set of goals than making money to make money in the online world. And for some reason it delights me that this is so.

Every year I watch a new crowd of those who "just invented all of this" come onboard, try to make a quick buck or control everything, and lose their pants in the process. And every year, some kid somewhere comes up with a clever solution to a nagging problem, not knowing it was really such a problem, tries to give it away in all directions, and for years can't get over the good stuff that keeps falling in through their window with people chasing them down from 60 or 80 countries with good will and good news - and quarters.

This year a really large new crop of entrepreneurs and in this case quite large corporate exploratives are showing up via the Internet and the World Wide Web. They will claim to have invented it or at least finally fixed it, storm in rage when it doesn't work for them, and within 18 months we'll see headlines of "Internet - What Went Wrong" replacing the current headline rage. But these people don't really leave much of a ripple in the overall scheme of things. What we are "watching" for at Boardwatch is the new wave of those who make that transition to success online. And the common thread of contribution to a vision of a future world of instant and ever more useful global communications seems to run through it.

So I agree with your view Michael, and would urge you not to let the appearance of short term success that you see in puff press releases cause cynicism. A CIX by any other name would smell as sweet I'm sure, but the action is in watching those who succeed - and they all seem to have something to contribute.

Jack Richard

WOW!

Hi Jack,

I just tried out that COMT program here at work. I have a direct internet connection at my workstation so I figure, hey what the heck if Jack says it's good, it's worth a try.

I contacted David Yon at Performance Design and he told me that it should work great and that I should use the latest version of COMT which is 1.03. I picked it up from anonymous FTP from FTP.STD.COM: /CUSTOMERS/SOFTWARE/RFDMAIL/COMT.ZIP.

I installed it with a bit of doubt in my mind. Logically, I did not or could not understand how it should work - bypassing the COM port output to the network card using a software shim? hmmm....

Anyway it worked! Amazing! In fact I am writing this post right now from my workstation (at work..shhhhh!).

Thanks for the great tip Jack, and kudos to David Yon!

I am so impressed that I am gonna buy a copy on my next paycheck.

Bruce Satow bsatow@library.berkeley.edu

Bruce:

COMT is certainly a gem and we're most pleased when we can dig something like that out of the muck and hold it up for our readers to see. I agree David Yon deserves your kudos. One of the more exciting things about the new challenges in Internet connectivity is

a really whole new frontier of software tool development. I'm a bit excited by it all - all over again.

What I would like to see now is an anti-COMT. COMT basically interfaces existing terminal software to TCP/IP through WINSOCK - allowing us to use our familiar terminal programs to telnet to a site and enjoy ANSI graphics, ZMODEM protocols, and so forth. Now, let's turn it around upside down. How about a program that works with MOSAIC to allow us to dial a BBS and view HTML documents over a modem. Essentially the reverse of COMT. The anti-COMT would dial ordinary telephone numbers like a terminal program, but provide a simulation of WINSOCK sockets/packet streams to a Mosaic browser such as NetScape. With this single piece of software, the BBS community that is NOT yet connected to the Internet could enjoy the graphics, sound, video, and so forth as an interface it has long sought, and ultimately provide either WWW access through the net, or dialup access via modem, to the same HTML documents. External references to other net resources would be a bit of a problem, but all internal references to databases, graphics, other documents on the same system, would be quite available.

Ultimately, I would like to see Uniform Resource Locators (URL) include voice telephone (voice://800.933.6038), data (data://303.973.4222), fax (fax://303.973.3731) and the ability to access all of them through a NetScape like browser. If I find a reference in a document to a voice://303.973.6038, I could simply click on it to call them and talk to them, fax a screen or document to a fax number by clicking on that, or logon to a direct dial BBS by clicking on that. And this should be built into the browser itself. But an interim solution in an anti-COMT would offer some of those advantages very quickly. And the direct dial BBS community would have a standard graphical interface incorporating sound, graphics, and video now.

Jack Rickard

OCTOBER DIATRIBE AGAINST INSURANCE

Jack,

I really enjoy reading the e-mail you publish in your magazine. The October issue had an interesting bit from you regarding the high cost of malpractice and liability insurance. I feel that I must write to you to present a different view on this issue.

I'd like to start by providing a little historical definition of insurance. Fundamentally, it is a system in which a group of individuals (or companies) put smaller amounts of money into a fund so that large financial losses by a few can be covered. It is a way of diffusing large losses by a few to many more fortunate individuals.

That said, I feel that too often big companies are blamed for the increasing costs of living in our fair country. The fault is ours, dear Brutus. It is all too easy to slap a huge loss suit against a doctor who made a human mistake because a) we believe doctors can make no mistakes because they get paid so much, and b) lawsuits aren't against people, they're "only" against the insurance companies. Many lawyers like to promote these ideas because they get a third of anything they can get for you. To the consumer it looks like money for nothing and no one gets hurt.

The problem with that reasoning is that a) doctors are of course human and do make mistakes and b) constant suits against insurance companies raise their loss payments and thus they must collect more in premiums to keep adequate reserves for the next loss.

Insurance is one of the most heavily regulated industries in the world precisely because of the possibility of fraud and misuse of funds. But because of this scrutiny, they are seldom able to "gouge" the innocent public.

No, the reason for high insurance rates is not "profit mongering insurance companies." The reason is that Americans are a lawsuit happy breed, with more lawyers per capita than any other nation.

Johnny Flores
The Real Estate Link BBS
Virginia Beach, VA
(804) 471-6276

Johnny:

First, note that I, along with most anyone else in the universe have at one time or another dealt with an insurance company. The lily white picture you paint doesn't bear any scrutiny at all - period. Though not the subject of my October diatribe, let me for the record state to anyone anywhere that works in the insurance industry - "Does your mother know what you do for a living?" That said, my October diatribe wasn't directed at the Insurance industry. If I had issue with them, I would so address it. I take issue with the entire concept of insurance as applied to medicine. It has become a cancer no oncologist can send into remission. And it is a bit like an addictive drug in that if a little is good, a little more seems better.

Now I suppose this would be the place where I'm to defend lawyers? Pass. What you say is probably true, but like so much of the debate, dances around the fringe of the question. If you don't have insurance, no lawyer will take a case against you. The insurance has become so much of the grain of our legal system, that you virtually can't collect a judgement against an individual unless they ARE insured, and thereby virtually no lawyer will take a case for his "third" unless

there is an insurance company or a government in the woodpile there somewhere. I suppose a case could be made that the occasional major corporation might sneak in, but it's hard to tell because they all have insurance for such things. For some of us, the act of NOT having insurance becomes a twisted form of legal protection. But it works best if you don't have much to start with.

I was trying to point out that every item used in medicine has a built in 80% markup to cover insurance expenses - many if not most related to legal liability. That includes the fringing electrical socket in the wall. And the insurance typically covers about 80% of the costs. It's a rough wag, but every individual item I happen to look at personally seems to break out to about a drive. If you took the insurance out of the price, you'd wind up paying what you pay anyway WITH insurance paying the part that is caused by insurance.

Dealing with insurance companies is administratively a nightmare for everyone that has to deal with them, and thereby expensive. And I'm fairly certain if we took them out of it completely, we would pay no more than we do now out of pocket for medical care. It isn't a big portion of it, it appears to be MOST of it in a most circular little shell game that moves vast amounts of money around in a very strange and largely useless circle. The only credible thing that comes out of it is a pool of venture capital provided by the insurance companies.

So I think the concept of privately socializing our medical costs needs rethinking. It has put medicine out of the reach of the least among us who often need it the most. So it hasn't been effective even in your definition of what it is supposed to do. The Clinton Administration's concept of a fix is to nationalize it, make it even bigger, and let the government run it. Oh, THAT will work. I myself NEEDED a \$7000 two-inch tube of toothpaste from a hospital.

My solution was to simply make it illegal to offer medical insurance. But you have brought up a natural extension to the concept. Let's make it illegal to offer insurance for legal liabilities as well.

If it makes you feel any better, we did apply to Sierra Insurance for group medical coverage here at Boardwatch. Subsequent to the October letters section, we were declined despite being broadly and perhaps under-servedly healthy. We should probably sue the bastards. But I'm taking a different tact. It will take a little research, but we're going to call their mothers...

Jack Rickard

Dear Jack:

This is my first letter to Boardwatch Magazine (I am a current subscriber) and I think it is a great magazine so keep up the good work. I have been to your wonderful state many times and really enjoy myself each and everytime. The part of Co. that I visit the most is Leadville in the central part of the state. We have some friends that own a house there and we rent it from them every other year for a week. I like the town so much that I subscribed to the local newspaper, the Herald Democrat. In the last issue I received dated October 20, 1994 there was an article on the front page with the heading "Locals looking for access to information highway". In the article, there was mention of no way for them to connect to AOL or Compuserve without using long distance. So, I was wondering if you have any knowledge of any BBS's in the area of Leadville or Salida (Salida is another large town in the same area as Leadville) that have Internet access or some way they could dial into AOL or Compuserve without going long distance. Thanks for any help you can offer.

Herb Weathersby
Humble, Tx
herb.weathersby@atticmac.com

Herb:

The Long Distance billing phenomenon is a historical legacy that really just doesn't make any sense anymore. That is not so much to say that I personally disagree with it, so much as it is something no one can explain rationally that would make any sense. Much of the interest in the Internet has nothing to do with networking or online services so much as it does in telephone bypass. I was at an Internet conference in Aspen and took a few questions after the dinner there, almost all having to do with connecting to things outside of Aspen without paying long distance charges. I'm not sure it is not the bulk of the interest in Internet. You can connect globally and without reference to geography.

One of the most interesting things about the Internet is its ultimate capacity to carry information of all kinds. The sort of inside saying is "packets is packets [sic]". To make a voice phone operate over the Internet is so trivial it will likely be skipped in favor of video-voice-telephone. Within just a year or so, communications will start to leak from our current system over to the Internet without the long distance charges and in significant amounts. Beneath the surface of this monster rages an enormous battle over how to bill for Internet access. Naturally, the long distance companies and most of the government oddly enough want to bill by the minute, or by the packet, or by the pixel, or by something other than the way most of it is sold now - by the pipe.

The reason this is a bit important is precisely because of Leadville. I sometimes think that many of our more popular problems all center on one thing, too many people on too little planet surface area. Spread 'em out a little and they're not nearly so hard to get along with. You put too many people in too little land and what have you got? California, that's what.

I think there is a fairly enormous and growing latent energy in our country toward dispersal. Much of our economy and the nature of employment has already changed sufficiently to allow a good portion of the population to live wherever they would like to, and entire industries could easily and even profitably move operations out of urban, high-tax, centers to Leadville Colorado, Pueblo, Montrose, Rocky Ford, Fort Collins, and points west, east, north, and south - if they could maintain communications. But in truth, that's a little difficult. And it all centers around a telephone system that has advanced scant inches since divestiture in 1984. I place most of the blame on the local monopoly Regional Bell Operating Companies (RBOC). Oddly enough, that is where most of the LONG DISTANCE revenues go - about \$2.70 per hour of your long distance costs go to local access fees set ten years ago. I'm hopeful of dramatic changes once anyone can play phone company, including cable companies, long distance phone companies, local telephone companies, and anyone with a truck and a pair of pliers in Leadville. And the other end of that is a change in pricing model driven by the Internet oddly enough.

Some of this was under debate in Congress this past summer. And I'm hopeful that under a Republican Congress it will be addressed productively in the coming year.

That won't make communication costs go away, but it should reduce them dramatically and eliminate many of the geographic penalties we now face. When that happens, this latent energy toward dispersal will start to unwind. I see an incredible boom in our economy from all of this moving to the country, and ultimately a better quality of life. The automobile allowed America to disperse from truly urban areas to a suburban lifestyle. And I think telecommunications will allow further dispersal into a nearly pastoral rural lifestyle. It should be a heck of a lot of fun.

That said, The Leadville BBS, (719)486-4295 run by Sysop Jim French, the Associate Professor of Computer Education at the Colorado Mountain College in Leadville sounds like what you are looking for.

Jack Richard

INFINITE BBS AND WWW SERVER

Nice to see Boardwatch on WWW - I came in with ISDN at my end - one suggestion if I may - don't use all upper case on

homepage/table1.html.

What bandwidth are you serving up at? It's plenty fast.

When you get a chance check out my WWW server and FirstClass BBS. I run the WWW server on a PowerMac 7100 with MacHTTP 1.3.1beta16 with ISDN. It's the machine on which I do my development work - most recently implementing cgi forms and authentication. It's also a good source for WWW development tools (especially for Mac users). I think that MacHTTP can do for the Mac what desktop publishing did for it a decade ago. I know full well what's involved setting up a WWW server on the different platforms and it is much much easier to get stuff up on a Mac and have all the bells and whistles of a Unix or PC WWW server - there's nothing I haven't been able to do yet. But enough evangelism about MacHTTP and the Mac as the best WWW server - I had to get my two sense in contrast to the BoardWatch PC bent :).

You can Telnet into InfNet* - our BBS - right off the WWW page or if you have a FirstClass client settings configured with TCP/IP you can get in with the same gui our dial-up modem users get by dialing in at 512.462.0633. The IP address is 204.96.111.157 port 4000.

I'm having a blast setting up WWW and First-Class online systems - and making a good business of it! Good luck and thanks for Boardwatch's help making online a reality.

JEFFJI@TXINFNET.COM

Dear JEFFJI:

We have a 56 KB leased line connection to Rocky Mountain Internet at the moment. Sounds like some interesting developments with WWW and FirstClass. I'll ask Mr. Reefer to have a look. It sounds like you're having fun.

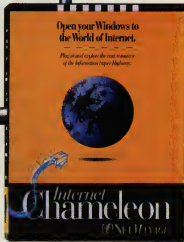
Jack Richard

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MUSTANG SOFTWARE REPORTS RECORD WILDCAT! BBS SALES

Mustang Software, Inc. released version 4 of their Wildcat! BBS product this past July with a more open architecture and a BASIC-like development language they call WcCODE that we rather raved about in our coverage. Apparently, the new more powerful Wildcat! has had a rather direct effect on BBS sales at the company, sufficiently so that the privately held company has released some fairly telling sales figures for the year.



- MUSTANG SOFTWARE REPORTS RECORD WILDCAT! BBS SALES
- CREDIT CARDS FOR BBSs
- MODELING THE DREAM CD
- MULTIMEDIA BBS
- HAYES FILES CHAPTER 11 BANKRUPTCY
- DIGICON AND ZYXEL DO 28.8 Kbps

Mustang was recently named to INC. Magazine's Top 500 Fastest-Growing Private Firms list. Mustang revealed sales of 4000 copies of Wildcat! BBS for 1991 and 11,000 copies for 1993 - earning them a place on the list.

As of July, 1994, sales of Wildcat! BBS were running at about the same pace as 1993. But subsequent to the release of Version 4, the company announced in December that it expects a year end tally of some 15,000 units - a 36% increase over 1993. Better, the company's high end BBS Suite product, listing at \$999 and combining the 250 node version of Wildcat! with an entire series of the more popular add-ons, has been very popular and has raised the average sale dramatically. Wildcat! starts at \$129 for the single-line version. As a result, Mustang expects gross sales for 1994 to top \$5 million for the first time.

Mustang also calculates an active installed base of some 30,000 systems. According to company president Jim Harrer, part of the marketing success in the past few years is attributable to their aggressive move into retail distribution of BBS software through software stores such as Software Etc. and CompUSA. In fact, Mustang was the first BBS software developer to package the product in a way that made sense on the store shelves, and established a distribution network through Ingram Micro to put BBS software on the shelf for the first time in 1990. The other aspect Harrer sees is an aggressive move to put together a complete package for business and government. Today Harrer claims that some 70% of the packages Mustang produces go into government or business applications, compared with about 10% of sales in 1990. The Wildcat! product is very strongly designed to work with Novell's Netware LAN operating system and with the ubiquitous

popularity of office LANs in businesses throughout the country, Wildcat! has claimed a spot as an inexpensive add-on to such LANs both for internal communications and to provide a dial-up BBS connection for suppliers or customers. Mustang Software, Inc., 6200 Lake Ming Road, Bakersfield, CA 93306; (805)873-2500 voice; (805)873-2599 fax; (805)873-2400 BBS; email: jim.harrer@mustang.com.

CREDIT CARDS FOR BBSs

by Brian Gallagher

Many sysops looking for ways to bill their customers for various services, or subscriptions will be glad to know that Cardservice International is providing credit card merchant accounts - filling an industry void left by Teleflora, Inc., when it recently left the market recently.

As fewer and fewer banks offer credit card merchant accounts of the "non-swiped" variety, (key-entered), Cardservice is targeting the BBS industry because they "...felt that would be a good niche for us, as we specialize in non-swiped transactions." Non-swiped credit card numbers carry an inherent higher risk than their swiped counter parts, a risk which Cardservice, with a full department dedicated to monitoring transactions for fraud, is willing to take.

CARDSERVICE INTERNATIONAL



Offering merchant accounts to the online community for the last six months, the service has already signed up several hundred BBS systems. Sysops who qualify will upload their transactions at the end of each day using Cardservice's proprietary software, who then processes the transactions making the funds available in the merchant's account within 48 hours.

The service does not discriminate against adult systems, offering their services to any and all businesses. There is a non-refundable \$155 registration and application fee for those wishing to get a merchant account through Cardservice, for those who wonder whether or not they will qualify, Tim Seidenfeld, a specialist for Cardservice's BBS Merchant Program said extensive pre-qualification is done before the application is sent through.

If, for instance, an individual has a very bad credit rating they will likely not be eligible for the standard

Full Text Searching

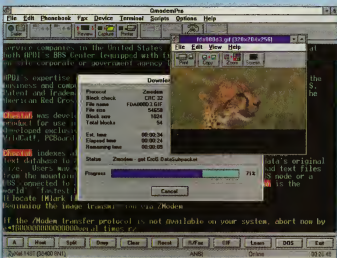
Need to add powerful full path text searching software to your business BBS? Cheetah is the solution!

Cheetah was designed by APDI, a leader in the BBS service industry. APDI listened to corporations, associations and government agencies who need a simple full text searching software to work with their BBS. From these talks APDI designed and developed Cheetah.

Cheetah enables you to search online for any combination of words in seconds! Cheetah lets your users access large amounts of data quickly and easily.

Cheetah also performs phrase and proximity searches. Users can specify word proximity within a paragraph or sentence and the file viewer conveniently highlights all found text.

Unlike other full text searching software, Cheetah was specifically designed for BBSs. Cheetah keeps track of users' time left on the BBS, mode settings, modem status and even allows users to download their search results using any compression software they choose.



Cheetah handles text and images — newsletters, magazines, even government regulations!

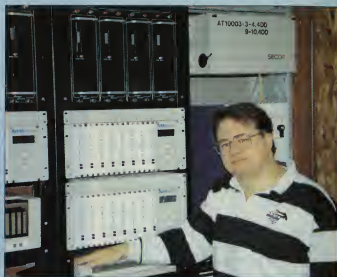
Cheetah is available in both serial port and Digiboard versions and works out of the box on Novell networks. Cheetah comes with an unlimited user license per BBS.

New Cheetah 1.5 version now shipping

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Cheetah 1.0 can be purchased at 50% off while supplies last.

So if you work for a corporation, association or government and run a BBS, or just have the task of building one, call APDI at 1-800-785-APDI and find out more about Cheetah's ability to give your users what they need.



Mark Burnett at APDI's BBS Service Bureau

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Companies looking for a serious BBS company to provide a wide range of services are choosing APDI. APDI is devoted to providing professional BBS services to corporations, associations and government agencies throughout the United States.

Typical APDI clients are organizations that need turnkey BBS solutions or advanced technical on-site support. APDI provides installation and support for WildCat!, Galacticcomm, PCBoard, TBBS, and Searchlight. APDI is a Certified Mustang Software Integrator (CMSI).

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Most of APDI's corporate customers find it advantageous to let APDI run the BBS for them at APDI's location. APDI provides all equipment (like the BBS center shown above) and handles all technical support and navigation issues on your BBS. APDI's fiber-optic cabling ensures crystal clear connections and communications to your bulletin board system.

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service, however, there is also a "reserve account" plan for such individuals. The reserve account is a set amount the applicant gives to the bank to insure their transactions. For instance, if a business were to receive \$2,000 per month of credit card transactions, they would need to give the bank \$2,000 in a reserve account to maintain their account.

Seidenfeld said, applications are generally processed in about three weeks with rates averaging less than three percent for those with good credit, to three and a half for those with somewhat less than good credit. A \$49 monthly fee is also added, regardless of credit rating.

Cardservice acts as a broker for credit card merchant accounts and is a registered agent for the Bank of Oakland, First Bank of Beverly Hills, Tehama County Bank, Humboldt Bank and Redding Bank of Commerce. In business for six years, the company processes \$1.7 to \$2 billion in sales annually.

Cardservice International, attn: Tim Seidenfeld or Roberta Schrang, 975 John Street, Suite 204, Seattle, WA 98109; (800)488-3559.

MODELING THE DREAM CD

In the past we've covered a significantly unusual emerging form known as "demos." These are short animations usually featuring dramatic graphic and sound effects. Ostensibly, they are created as intros to game software, logo animations for demonstrations, and so forth. But they've attracted a serious group of programmers devoted to this animation art form.

Waite Group Press has published an unusual book by Phil Shatz titled *Modeling the Dream CD, Walkthroughs and Flybys II*. This slim 128 page book covers demos, 3D animations, Autodesk's 3D Studio program, Sound Blaster demos and so forth. The book talks in general terms about the creation process, discusses a few of the tools such as GRASP, and surveys many of the truly impressive examples of demos that are available. We were surprised to find that a number of examples, including most of the back cover art, was done by Jeff Rouyer, one of the principals in our own Boardwatch graphic art department. His Whirligig animation won the Waite Group's Making Movies contest. Notably, this



Jeff Rouyer's award winning animation, "A Whirligig is Born"

book comes with a CD-ROM full of the examples, providing some of the best eye candy you can get for your PC. At \$32.95, if you have any interest in 3D animations, this is one of the rare books covering the genre and quite readably so. ISBN1-878739-67-0. It can be ordered directly from Waite Group Press, 200 Tamal Plaza, Corte Madera, CA 94925; (800)368-9369 voice; (415)924-2575 international; (415)924-2576 fax.

MULTIMEDIA BBS

by Brian Gallagher

Paragon Technologies is slated to debut the much ballyhooed DOS-based DarkStar v.1.02a multimedia BBS software on December 24 on over 400 systems around the world. The software made a very impressionable and audible display at the ONE BBSCON show this last August, with a pair of not-so-standard speakers and a video clip of a spaceship flying around the screen. Incorporating full-motion video, digital audio and an online database facility into the system, the new version represents a "ground-up" rewrite from previous versions according to a press release from Paragon.

Besides the multi-media interface, described as having a "Mosaic feel," the software also opens up a new era in sysop control. Under the v.1.02a release, a sysop sees what a user sees -

including their mouse pointer and its movements, and they can even seize control of the mouse and walk users through various areas of the system.

Version 1.02a revolves around the definition of hot-keys much like other ANSI based systems. The hot-keys are invoked by pressing a hyper-button, icon-button, pull-down menu or a touch-zone. Supporting PCX, GIF and BMP images, MOD, WAV, VOC, MID and CMF audio formats, the windows font standard FON and the FLI full-motion video standard, the system is capable of playing an FLI video and running a WAV or VOC audio file simultaneously.

The price for the beta version is \$149, purportedly able to support 9,999 users, after the December 24 release date however, the pricing structure will take on a more "competitive" air - 4 nodes for \$149, 16 nodes for \$249, 64 nodes for \$449 and 256 nodes for \$999. For your money you will get DarkStar v.1.02a, which includes a graphic editor, icon editor, mouse pointer editor, full database compatibility, (supporting DBase II, III, III+, IV and FoxPro with options for photo and audio fields), a graphic configuration facility, the freely distributable StarLink terminal package, a media player and support for Hudson, JAM, MSG and SQUISH format message bases.

Gain from our expertise.SM

✓ Unmatched Experience

We are a full-service, professional company that specializes in telecommunications hardware and software, Bulletin Board Systems and related applications. For over eleven years, we've been setting up bulletin boards for customers all over the world. We also run an award-winning BBS in Atlanta which has grown from a single-line system to the largest system in the state of Georgia with 40 telephone lines and thousands of satisfied users.

✓ Turnkey Solutions

In addition to selling the software and hardware components necessary to let you put your own system online, we have the ability to provide our customers with total turn-key systems. We have several programmers available to transform your ideas into realities quickly and at very reasonable rates.

Our customers range from the single-line hobbyist BBS system to corporate users running very large online applications. In addition to handling customers all over the United States, we are experienced in working with customers overseas, or wherever phone lines can be found.

✓ Our Goal:

The BBS industry is undergoing tremendous growth and is rapidly changing. It is our goal to provide our customers with professional, economical, and sensible solutions to their communications needs as we provide them with the best software and hardware in the industry.

Balancing low price with professionalism and service after the sale, we are able to provide you with a truly economical solution to your needs, without sacrificing quality.

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- | | |
|---|--|
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| <input type="checkbox"/> On-site Installation | <input type="checkbox"/> Training and Support |
| <input type="checkbox"/> Configuration Assistance | <input type="checkbox"/> Professional Consulting |
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| <input type="checkbox"/> Remote BBS Support | <input type="checkbox"/> Internet Connectivity for BBS |
| <input type="checkbox"/> BBS "Service Bureau" | <input type="checkbox"/> and Local Area Networks |

Customer Service

Each time we see one of our customers put a RBS online, the excitement grows. I hope that you will give us an opportunity to help supply you with your hardware and software. If you have any questions about bulletin boards, I encourage you to pick up the phone and give us a call.



Rodney A. Aloia
President

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Shopping Mall	\$189.00	Galactiboard (8-port serial card)	\$449.00
Search and Retrieve	\$149.00	Galactibox (16 slot modem chassis)	\$1379.00
Dial-Out	\$149.00	OST PC XNet Card	\$999.00

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Like many GUI (graphical user interface) systems, DarkStar does require its own terminal package (StarLink) to get the full effect of what it can do. At 14.4 kbps, the DOS-based StarLink takes around three minutes to download and will occupy 313 K of hard drive space. Unlike some of the other GUI systems, however, DarkStar does support ASCII, ANSI and AVATAR non-graphic modes.

The sole author of DarkStar is Jerry Hunter, who has been running a BBS since 1982 when he also wrote and released CB-SIM, an ANSI door for RBBS - the first multi-node chat facility available for any BBS. In fact, the forward slash hot-keys prevalent on many BBS chat systems originally appeared in CB-SIM. As would be expected, DarkStar will support multi-node chat.

A thing or two about multi-nodes, there is not a built-in multi-tasker in the DarkStar software package. To run multiple nodes, sysops will need to be running some other multi-tasker such as Desqview X or OS/2 - it will not work with windows. Tony McDougale, CEO of Houston-based DarkStar Publishing said, eight nodes have been tested running with Desqview X and 16 nodes have been tested running OS/2 Warp.

DARKSTAR BBS's

Brenda Levin	Diamond X-Change	201-358-6086
Dan Stein	Digital Spectrum	201-664-0571
Michael Gunther	The Playhouse BBS	206-964-3425
David Dunster	WedgeNet BBS	306-569-2849
John Powell	Metaverse	317-664-8884
Les Bishop	PCW Inc	317-926-7581
Ken Hancock	Canada Dist	403-781-0803
William Raynor	MoonScape	407-351-3360
Lee Christensen	MCS OnLine Services	501-365-8503
Joey Fowler	Black Fire BBS	501-545-3643
David Crafact	Alcatraz	501-621-8418
Rick Ward	CyberNet Dimensions	501-621-9387
Jerry Hunter	CommCentral	501-631-5976
Gerry Pierce	Silicon Reality	501-779-0108
David Rodriguez	SilverThorne Systems	504-563-2603
Raymond Barnes	DataBank Message Ctr	504-686-1440
Roger Lalone	RamJet's Roost	519-443-4797
Rob Ballard	/dev/null	602-992-5720
David Fillmore	FlatLand BBS	604-332-6748
Gary Allen	The Cruise Director	604-762-2893
Carl Schiavoni	Mykonos Libraries	610-626-6778
Tim McGuire	Christian Resources	614-497-3203
Richard McShane	Outer Limits	702-482-3249
James Fussell	Final Frontier	703-339-0847
Tony McDougale	Publishing	713-894-5993
Steven Stepp	Frontier BBS	719-536-0040
Michael Ferguson	Capricorn Concepts	805-256-6634
Gary Brown	Andromeda Galaxy	817-321-4702
Tommy Smith	CyberQuest Tech	814-682-6213
Jeremy White	The World Beyond	904-682-4986
Joseph Novak	Future Domain BBS	914-754-7472
Ed Vandemeersch	France Dist	(33)206-31262
G. Massarelli	Italy Dist	(39)6-7825325
Roderick Adams	United Kingdom Dist	(44)604-786878
Oliver Rhoad	Germany Dist	(49)8450-91071
Michael Mansour	Australia Dist	(61)2-725-3541

A notable omission in the software is the absence of Internet compatibility. There is, however, support for DarkNet, a Fido compatible network which should help to fill the void until Internet compatibility is established, projected to be completed in the first quarter of 1995. Also in the works are a QWK compatible offline mail reader, a front-end mailer and an ANSI editor.

McDougale said there are number of third party developers working on several option modules for the open architecture of the system. By the December 24 debut, he said, there should be 15 games ready to go. Reality Check, is an arcade quality game which will support 10 simultaneous nodes in a starship setting. It is reported to emulate the carnage found on the popular bang-bang-shoot-'em-up games Wolfenstein and Doom, by id software. Das PanzerFuehrer is an eight node tank game also reported to have arcade quality VGA graphics.

Paragon Technologies, Team DarkStar; 10601 Grant, Suite 102, Houston, TX 77070; (713)894-8555 voice; (501)631-5976 BBS.

HAYES FILES CHAPTER 11 BANKRUPTCY

Hayes Microcomputer Products Inc. filed for Chapter 11 bankruptcy protection in mid-November listing approximately \$100 million in assets and a similar amount in liabilities. Hayes, a privately held firm, is widely viewed as one of the solid performers in the online community, which was rocked by the announcement.

The problem did not seem to center on sales. In October, the company had announced sales of over \$270 million for the Fiscal Year ending September 30th and claimed some 38% growth from the previous year - led by the

company's Hayes Smartmodem OPTIMA 28800 V.F.C FAX product. In specific areas such as Asia, the company had encountered growth rates as high as 130%, and had moved strongly into retail channels in superstore and mass merchant channels with their lower priced ACCURA line.

Indeed, the growth may be the heart of the problem. Hayes appears to have contracted for out-of-house manufacturing early in the year, and ordered in a relatively huge inventory of component parts for modems. But between April and July, the new manufacturers didn't actually ramp up to produce any modems. By autumn, modems were in short supply, but bills from component suppliers were not.

In the face of this, modem prices have been dropping nearly 15% each quarter as increasing numbers of manufacturers bring up modem lines based on readily available chip sets from Rockwell and AT&T. Indeed, Intel dropped out of the modem business just a few months earlier citing it as simply unprofitable. They had done well with their SatisFAXion line of modems in the market, but simply weren't making any money at it.

Hayes himself may have contributed to accelerating the normal fall in modem prices. Historically, the new modem technologies are introduced with prices in the \$1100-\$1200 list range and fall from there. With the uncertainty of last year's battle between the 19,200 bps V.32terbo technology championed by AT&T and the Rockwell/Hayes V.F.C entry, while everyone waited for an ITU V.34 specification that was too slow in coming, Hayes introduced product incorporating V.F.C at 28,800 bps and with a list price under \$500. This broke the question of which modem to go with at the time and made V.F.C so strong it has muddled the V.34 entry which was finally approved in June. So while it launched Hayes into the catbird seat in some ways, it effectively spiked the price of modems - good news for the online community, but not so good for modem manufacturers.

And it worked for Hayes in many ways - unit sales are as noted over a third higher than the previous year. But it contributed to cash flow problems that came to a head in November.

BOARDWATCH MAGAZINE

This Month: BBS Operator's Survey

Fax to: (303) 933-6204

We regularly receive questions about electronic bulletin boards. Unfortunately, we genuinely don't know the answers to many of these questions. We do see data published, but are pretty well persuaded they don't know either. This month, we've created a fax survey form. If you operate a BBS, fill it out and send it in. We'll count 'em and publish the results in the next issue of Boardwatch Magazine. Then we'll all know. The survey is anonymous. We don't want to know who you are. *We want to know what you do.*

1. How many lines do you currently have connected to your BBS, able to accept a direct dial call from a caller? _____
2. What BBS software do you use (title/version):

3. How many entries are contained in your user/caller database at this moment? _____
4. How many new callers contact your BBS for the first time each month? _____
5. How many regular callers actually call your BBS at least once per month? _____
6. How many callers pay a fee to access your BBS? _____
7. How long in years and months has your BBS been in operation?

8. Gross monthly revenues from BBS operations: _____
9. Do you offer your callers an electronic mail connection to the Internet? _____
10. Do you offer callers USENET News access? _____

Will Hayes survive it? Actually it may already have. No layoffs seem pending as a result of the bankruptcy, but the company had already laid off a significant number of employees early in the summer and currently have about 1100 on staff. And rumors within the company indicate that manufacturing is actually back on track and they are working off the backlog of modem deliveries, and they seem to be making aggressive plans for '95. The Chapter 11 seemed designed to buy a little time on the fairly huge bills for inventory parts - unusual only in that this was what Chapter 11 was designed for, and is rarely actually used for. Unless they get caught in an even more precipitous price decline over the next 90 days, we would expect them to survive it. But it can't be good news for one of the leading names in the modem industry. Hayes was founded in 1978.

Hayes Microcomputer Products, Inc., 5835 Peachtree Corners East, Norcross, GA 30092; (404)840-9200 voice; (404)441-1213 fax; (404)446-6336.

DIGICOM AND ZYXEL DO 28.8 KBPS

by Brian Gallagher

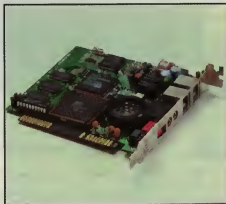
Two modem manufacturers a bit late with supporting 28.8 kbps speeds are making up for lost time on the speed front by being among the first to implement Radish Communications Systems, Inc.'s Voice View protocol, allowing both voice and data to be transmitted over a single telephone line. Virtually all major modem manufacturers plan to support the protocol, (featured in the December issue of Boardwatch), including AT&T, Intel, Microsoft, IBM and Rockwell International among others, some time in the coming year.

The first out of the gate offering Voice View support was Digicom with their Connection Pro with a retail price of \$179 recently dropped from \$249. The Connection Pro, available late in 1994, is not a 28.8 kbps modem, rather it supports 19.2 kbps transfers with the V.32 terbo standard. Not to be left out of the high-speed game, however, Digicom is releasing a 28.8 kbps modem of their own, the Connection 288DF, which is also reported to support the Voice View protocol.

While the Digicom is by no means the first, (or even among the first), modem

manufacturers to release a 28.8 kbps product supporting the new V.34 standard, their proprietary SoftModem technology does set them somewhat apart from the crowd. SoftModem allows users to get new upgrades electronically, rather than replacing hardware inside of the modem, i.e. chipsets or modules. The upgrades are available via America Online and on one of two of Digicom's own BBSs; their general service BBS, (408)262-1412; and another system supporting only their connection series products, (408)262-5629.

Jay Blazensky, vice president of marketing and business development for Digicom, said, "As is typically the case with any new modem standard, the V.34 standard, although approved, will require some fine tuning of each vendor's implementation for several months. As the standard matures, we anticipate the continuous need to



Digicom's Connection Pro, first modem to support Radish's Voice View protocol

upgrade users with the latest compatibility and line performance improvements."

Included with the Connection Pro and the Connection 288DF will be Delrina's WinFax 3.0; the Connection Pro will also come with RingCentral voice software for Windows and the Connection 288DF will be accompanied by Mustang Software's QModem communications software.

Not to be left out when it comes to speaking or speed, ZyXEL, modem manufacturers in Anaheim, California are finally releasing their own 28.8 kbps to the masses reported to be in the first quarter of 1995, and like the Digicom modem, it too will support the Voice View protocol. In addition to Voice View support, (which they are implementing throughout their entire 1995 product

line-up), ZyXEL ups the ante by also configuring the modem to be upgradeable to support digital - ISDN transfers, via a module to replace the V.34 module within the modem.

The reason for the delay in having a V.34 compliant modem is consistent with ZyXEL's corporate vision of providing full-featured and reliable products to consumers. Gordon Yang, president of ZyXEL said, "Our policy has always been to quality engineer our products to be consistent with the latest industry standards. We also conduct thorough field testing of all our products in real-world applications. This way, our users are assured that the ZyXEL V.34 modems are 100 percent compatible with standard and with other modems."

Also included in the "full-featured" modems, are adherence to the Telephony Service Providers Interface, (TSPI), making the implementation of the Telephony Applications Programming Interface, (TAPI), possible. TAPI enables a user to set-up a voice answering system, detect a hang-up, record connection time, or switch between operator and computer answering. Dual Tone Multiple Frequency, (DTMF), tones are supported as well, giving the added capability to navigate individual and departmental mailboxes, select fax-back documents and initiate call forwarding and paging.

The modems possess both serial and parallel ports with serial port speeds of up to 230.4 kbps and the bi-directional parallel port interface can be hooked up to a PC's parallel port or to a printer for faxes. Users will also have the ability to purchase an add-on 8 MB DRAM module enabling the modem to automatically receive faxes without the user having to be present.

Incorporated to the design is an RJ-11 jack for connecting to cellular phones or laptop/notebook computers, and a jack is also provided for an external microphone or speaker. Prices for the modems are yet to be announced.

Digicom Systems, Inc., 188 Topaz Street, Milpitas, CA 95035; (800)833-8900 voice; (408)262-1390 fax; (408)262-1412 BBS; (408)262-5629 BBS.

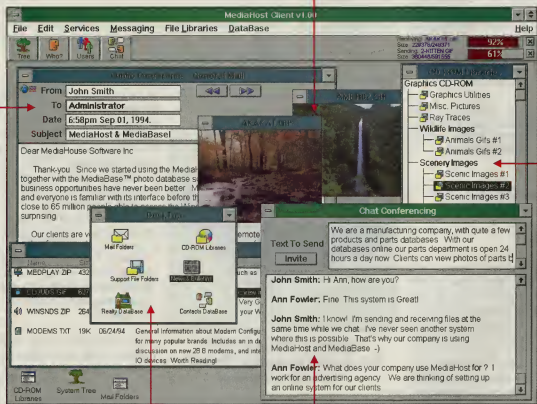
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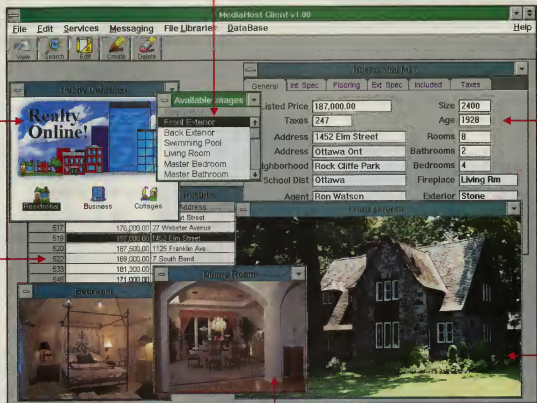
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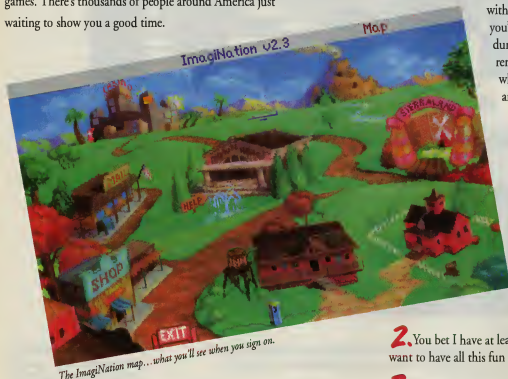
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BEGINNER'S LUCK by Doug Shaker

I WANT MY OWN BBS

Doug Shaker owns and operates The Smalltalk Store.

He can be reached via e-mail at doug@smalltalk.com. He has one wife, two children, three cats, four computers and five telephones.

I am going to start a BBS. I haven't ever done it before, but I am going to do it in the next few months. And that is what this column is supposed to be about - the experiences of an ordinary bozo trying to put together a BBS, get people to call, and maybe even make some money. I won't claim that what I will be doing should be guidance for you. I expect to be making plenty of mistakes.

The shortest way of describing myself is to say that I am an aging hippie nerd. I used to run support and training organizations for software firms in Silicon Valley. I spent seven years with an AI (artificial intelligence) company, then three years with a Unix software company. About a year ago, I quit to start a one-person mail-order software company in my spare bedroom. I've been growing my hair and my beard since I quit and now I am a reasonable facsimile of my '70s self, except that I'm all gray and wrinkled.

My company, The Smalltalk Store, sells development tools to Smalltalk programmers. It is doing reasonably well - that is, when I work ten or 12 hours a day, it pays for my computers and I don't have to wear ties. Some months I even make money. Earlier this year, my wife explained to me some dreary provision of the tax code that makes it better for me to buy equipment in 1994 than in 1995. (I am writing this in November 1994, though you are probably reading it in 1995.) Then she asked me if I needed or wanted to buy any capital before 1994 ends. I said "Naw, nothing except maybe a computer for a bulletin board system."

Where that bizarre thought came from, I'll never know. It's been in my brain ever since, infecting my daylight hours like the techy equivalent of some stupid upbeat tune that you can't stop repeating - "It's a small world after all. It's a small world after all. It's a small, small world." Only for me it's more like "A BBS, yeah, a BBS. I could have a section for job listings and a section for discussions on design and internet mail and...." Then I spin out a fantasy that nearly involves the Queen of England getting into a chat session with Hillary Rodham Clinton and deciding that Smalltalk should be the programming language of choice for NATO. I'd give them free accounts, of course, but something tells me my board wouldn't really be quite that popular.

So, to prove to myself that I am more than just a source of warmed gas, I went over to my local bookstore and got a copy of *Boardwatch*. ACH! What a pestilent mistake! Rickard's column makes me feel like BBSs are not only the wave of the future, but sysops are the electronic equivalent of freedom fighters. Rally to the cause! Freedom of information depends on small local providers with nothing to lose but their disk space! Give me open peering with no settlement or give me death! Eat parity, CIX!

Not only that, the magazine has all these ads with lovely technology for sale. Lovely, sexy, wonderful technology. Satellite receivers, for goodness sake, for about \$500. Satellites! Techno-flashback! I haven't thought seriously about satellites since NASA stopped sending people to the moon. In my mind, I see shiny, gold things with antennae and solar panels rotate slowly as the blue-green earth turns

beneath and the theme from 2001 plays in the background. Yikes, talk about romantic technology! And they want me to buy a receiver for one I can get my news feed off of it. I mean it makes sense if it is as cheap as they say, but it also makes my blood race to think about having something personal to do with a satellite. Jeez.

Then, of course, there is the megalomania. The board will be mine, Mine, MINE! I will control the vertical, the horizontal, the menu structure. I will grant free accounts, cut off access, set the theme, start the conference sections, do it my way. Frank Sinatra starts singing in the background on this little fantasy, "I did it mmyyyy wayyy" and I cut it short. I don't like Ole Blue Eyes much.

You might say I'm hooked. I've got to do one.

But there is just one leeeetle problem. I'm a novice, a rube, a bozo, a newbie, a tenderfoot. I don't know the first thing about BBSs. I've used them so I guess that is a form of experience, but it don't count for much. They don't give you a satellite just for knowing what a modem is. There must be some application form or something. And you got to set the BBS up and get it to work with those fancy serial cards. I'll need to learn about INTs and DMA channels and all that crap. I'll bet you need to know something to make it all work. And I really don't know what the f*** I am doing.

I'm in a fever pitch of self-abasement now, but I really want to do a BBS. Time for a reality check. I'm not stupid. I must know something. Reviewing what I do know, I find I know that I need, at minimum, a computer, some phone lines, some reason for people to call, and some BBS software. OK, the computer I can figure out. The phone lines, I know where to get the phone lines. I think I know of some interesting and useful things to do on the board.

BUT I am not so confident about being able to figure out the software. I mean, I looked at the list of BBS software vendors and there are 40 different companies listed. And the list has all these other little niggly number things. RIP? FIDO? QWK? What a great name for a low-budget martial arts film - "Rip Fido meets Vincent Qwk!" What IS this stuff? It looks complex. How depressing. I don't even want to call all those people up, much less make a rational choice between their offerings. Yuk.

And then, supposing I get all this set up, how much work is it going to be? Too much, I know. Hours of downloading, virus testing, e-mail, news, etc. every night, just to make my users (MY users, though) happy. Maybe it will work out. Let's hope it will work out. Let's just push the question of how much work it is going to be to the back of my mind and hope it will somehow find an answer for itself there and not bother me anymore.

I want my techno-toys and I want them now.

Next month: Doug chooses his BBS software. Wish him luck. He'll need it. ♦

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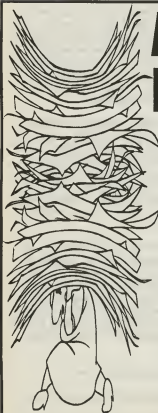
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by Gary W Funk
Gizmologist

NUREALITY'S VIVID 3D PLUS

Telecommunications has moved from text to graphics, and now to sound. With BBS software and terminal programs now supporting sound, and the explosion of Web sites through the Internet, everyone is, or soon will be, doing sound. And almost all new computers are being shipped with CD-ROM drives and sound cards. But even with a good sound card, you don't get the sound you really want to hear.

You want 3D sound and so did Thomas C.K. Yuen, co-founder of AST Research. He started by visiting a company called SRS Labs located in Orange County, California. He walked into their offices one day and asked for a demonstration. They put him in a room with their Sound Retrieval System (SRS) where he was surrounded with 3D sound coming from only two standard speakers. By the time it was all over, Yuen left the SRS Labs offices minus \$2.7 million dollars and with the new title of Chief Executive. Thus was born NuReality.

Though NuReality is a relatively new company with a new product, it has taken the market by the ear. What makes NuReality's products so great is simply that they work. You get very clear 3D sound that can be found on only the most expensive sound cards or stereo systems. And though NuReality's products have only been on the market since April 1994, the company has won awards and been given high praise throughout the industry.

The heart of these products is the three dimensional sound technology developed in 1988 and previously owned by Hughes Aircraft Company. Their plan was to sell it to commercial airlines. SRS would make the soundtrack of a movie seem as if it were coming from the screen, not the headphones. But the airlines were not interested in good sound. After all, passengers are not used to good things on an airline. After investing millions of dollars to develop and patent the 3D technology, Hughes decided that it was not what they wanted to do. So, SRS Labs obtained the rights to the technology, and with it four international patents with over 240 patent claims in 11 other countries.

The SRS technology actually fools the ear. It makes the sound seem to come from different directions, when in fact it all comes from the speakers or headphones. This trick is managed by applying a different amplification to each of the component frequencies of the sound.

The Vivid 3D Plus is an external unit that plugs in between the speakers and the sound card, and is very easy to install. Plug the output cable from the 3D Plus to the speaker, plug the cable from the sound card to the input on the 3D Plus, and then plug in the AC adapter. That's it, you're done. Turn it on and adjust the volume on the 3D Plus and listen to the most



NuReality's Vivid 3D Plus

wonderful 3D sound you have ever heard coming from a computer. But wait, there's more. Pull out Pink Floyd's *Dark Side Of The Moon* CD and place it in the CD-Drive and press play. Sit back and enjoy the sounds that weren't there yesterday.

But wait, there's still more. This unit is not limited to your computer. This little black box of wonder can also be used on your home stereo. I tested it on my portable CD player with its small speaker system and it sounded better than the Sony system I bought my daughter. It also works on game systems. I hooked up the Sega Genesis, plugged in the Vivid 3D Plus, and played games till the sun came up. And for you DOOM II players, the sound is fantastic.

When it comes to sound, SRS is what you want and NuReality is where to get it. If you didn't get one from Santa Claus, this is one gift you should buy for yourself.

With a suggested retail price of only **\$99.95**, the Vivid 3D Plus is well worth having. This unit does for sound what sound cards did for multi-media.

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The online community is largely driven by communications technology, and the technology is largely driven by people. So while most stories in Boardwatch are the story of the development in large and small ways of tools and technology to communicate, ultimately all stories are people stories. Often the people who are actually building an information superhighway are inordinately focused on their business and of course the technology they develop. And generally they have little time for or interest in what they need most - a hobby (some would say a life, but whatever)...

In casually talking with these pioneers, we noticed a recurring theme. Much like medical doctors tend to be "gadget" people, these guys tend, for some inexplicable reason, to be almost universally automobile buffs. Several actually race automobiles and a number of others prefer very high technology automobiles. A few don't, but THEY tend to focus on very unusual autos or other transportation devices of unusual nature.

So on a lark, we decided to do a pictorial guide to some of the road crew on this information superhighway, and their "ride" of choice on the concrete one. Selection for the list was largely a function of our ability to wheedle a photo out of them, but we found they were surprisingly enthusiastic about photos and conversation about their wheels. We also learned some new things about how they got started in their businesses. Overall, we hope this special spread, which really doesn't have anything to dial or connect to, offers some insight into the people behind the online community, and to who drives what OFF the Information Superhighway. Enjoy. ♦

Road Crew on the Information Highway — What THEY Drive to Work

by Brian Gallagher



Bruce Barkelew, 40, CEO of Datastorm Technologies, Inc., of Mexico, Missouri, makers of the popular communications software ProComm Plus has always been a fan of high-speeds. Growing up in a small town, he found "there were only cars and guitars to fill my time — I did both." Barkelew first started racing when he was 16 years old at the local drag strip and has since become a serious contender in SCCA Trans Am Series racing.



In 1992 he won the SCCA Mid Division championship in GT-1 driving a Chevrolet Camaro and more recently he finished 17th in points for the season and had two top-ten finishes in the 1994 racing season. The car in the photo is Datastorm's 1994 Camaro with a 310 cubic inch Chevrolet V-8 engine built by Katech, Inc., of Mt. Clemens, Missouri. The 2,550 pound car has a steel tube frame and produces a healthy 625 horse power.

Datastorm Technologies, Inc., P.O.Box 1471, Columbia, MO 65205; (314)443-3282 voice; (314)875-0595 fax. ♦



Joe Overholt, 48, Planet Systems, Inc., manufacturers of Planet Connect satellites, prefers keeping his commuting electrical - with an all electric car he purchased from a golf cart dealer. The vehicle, a 1976 Commute-O-Car, has a top speed of 50 mph and a range of 30 to 50 miles. The car runs on eight (six volt) golf cart batteries that produce a total of 48 volts at top speed and has several

bright spots: one is trouble free starts on cold mornings, another can be found by dropping a metal wrench across the 48 volt dc buss, which Overholt did just once, vaporizing the wrench in a flash. He plans on using the vehicle as a driver trainer for his three sons, Dan, 15, James, 11, and John, 5.

Overholt graduated from the University of Tennessee with a bachelor's degree in electrical engineering in 1970. In 1980 he entered the satellite communications industry for the first time as a manufacturer of electronics for satellite dish positioners and receivers. Six years later he formed the public company Shop At Home, Inc., a satellite delivered home shopping network.

In 1991, Overholt left his CEO position at Shop At Home and started the first satellite data service for consumers titled Skylink. Running at 9600 baud, Skylink became the predecessor to Planet Connect running at 19,200 baud - which won a Dvorak award for the best new product of the year at the 1994 ONE BBSCON convention in Atlanta, Georgia. When he is not busy working at Planet Systems, Overholt enjoys swimming, computers (imagine), home theater and taking care of his three sons.

Planet Systems, Inc., 1065 Cosby Highway, Newport, TN 37821; (615)623-8300 voice; (615)623-8751 fax; (615)623-9889 BBS. ♦



Dennis Hayes, 44, president and founder of Hayes Microcomputer Products, Inc., weaves his way through traditional traffic in the refined style and power of a 1992 V-12 (12 cylinder) Jaguar XJS. His route to becoming one of the industry's largest modem manufacturers began with a keen interest in technology as a youngster, had a pit-stop on a borrowed dining room table where he and Dale Heatherington assembled about five modem board units per day - ultimately leading him to the finish line as one of the world's largest hardware and software suppliers of computer communications products.

Hayes attended the Georgia Institute of Technology, (Georgia Tech), in the early '70s majoring in physics. While there he participated in a co-op program with AT&T Long Lines, where he learned about microwave transmission, big cables and the operation of worldwide

telephone networks. Some time later, he interrupted his studies to work for Financial Data Services, (FDS), a company specializing in automated teller workstations.

Working at FDS, he helped to develop the first four-bit microprocessor providing advantages in speed and a five to one part count reduction making printers operate more quietly. A crucial reckoning came to Hayes while working here: to effectively compete with large corporations a specific target market should be focused upon, one that the larger companies had, for the time at least, overlooked.

Back at Georgia Tech, Hayes served as the only undergraduate teaching assistant for the physics laboratories before leaving to work for National Data Corporation, (NDC), where he was responsible for overseeing operations of the communications network staff. While here he customized modem capabilities to fit various computer terminals and recognized the need for an intelligent modem - one that would store settings or could be configured using software rather than by doing a manual setup. The final insight he needed to start his

own company came with his involvement developing microprocessor-based systems on a large mainframe installation.

At NDC Hayes met Dale Heatherington, who later helped him form D.C. Hayes Associates, Inc., in January of 1978. Assembling modem board units at the rate of five per day on a borrowed dining room table, the demand quickly outstripped production and the base of operations was consequently moved to facilities in suburban Atlanta.

Hayes Microcomputer Products, Inc., 5835 Peachtree Corners East, Norcross, GA 30092-3405; (404)840-9200 voice; (404)441-1617 voice - customer service; (404)441-1213 fax. ♦



Jim Thompson, 48, managing editor of Radio Central News and Western News Service, has been a journalist and award winning foreign correspondent for more than 20 years and is the proud owner of a 1956 Dodge Royal Lancer, Le Femme - a special edition automobile, (only 1,000 were produced) specifically targeted towards female drivers. Featuring women in their advertisements and coming with a special make-up kit for the woman driver, the car

came in a color best described as a smoked salmon and cream cheese, Thompson said.

The original owner of the car was his grandmother and the car is entirely original, except for a new set of seat covers that were installed in 1966. The engine is an eight cylinder Super Red Ram with only 75,000 original miles and runs better than his new car, and the trunk is giant as is the interior space, "...more interior room than many small houses," he said. Featuring a high-tech push-button automatic transmission and a radio which could search for the next available station, by actually moving the indicator needle across the display, with adjustments for town and country sensitivity, the car was ahead of its time. However, with no power steering, (a huge steering wheel is provided), and no power brakes, the car can be a bit of a chore to drive.

Thompson has worked for virtually every major radio and independent television network in the United States, as well as the United Press International, the Associated Press and Reuters. He is responsible for establishing the first all-electronic television newswroom in the United States and manages the Marlboro Racing News BBS for journalists.

Western News Service, Jim Thompson, CompuServe: 72777,2677; MCI Mail: 321-4127; Internet: jim.thompson@wnsnews.com ♦



Bob Mahoney, 42, founder and president of EXEC-PC, the 280 line monster BBS located in New Berlin, Wisconsin, has found an escape from cyberland behind the wheel of any number of one of his classic Mustangs, often at speeds of 100+ mph. Mahoney, who races in a local hobby club, was enticed by Mustangs while in high school cruising around in a friend's father's 1965 convertible and at the 1965 world's fair where the Ford exhibit had a string of convertible Mustangs which drove around the various features of the display.

Wetting his appetite for the collectible car as a youngster, it was the 1970 Road America Elkhart Lake, Wisconsin Trans Am race where the 1970 Boss 302 Mustangs really caught his eye. Since then his specialty has been the 1970 Boss 302s, adding that when one gets into restoring vehicles, there are so many different details about making a car completely original that specializing in a particular make, model and year is the only practical thing to do. In addition to his Mustang collection, (including a show winning 1967 Shelby GT 500), Mahoney has a 1991 Nissan 300ZX twin-turbo modified to produce 400 horsepower and his most recent racing addition - a 1986 Roush Capri Trans Am producing 600 horsepower, once raced by such notables as Willy T. Ribbs and Lyn St. James. He has driven the car as fast as 170 mph, and has spun the car out at 100 mph prompting him to say, "it's a rocket...it's terrifying."

EXEC-PC, Bob Mahoney, 2105 S. 170th Street, New Berlin, WI 53151; (414)789-4200 voice; (414)789-1946 fax; (414)789-4500 BBS. ♦

Ross Glatzer, 48, president and CEO of Prodigy prefers good old American muscle when it comes to his wheels of choice. Commuting in his 1992 Chevrolet Corvette to Prodigy offices in White Plains, New York; his favorite car, a 1970 Oldsmobile 442 sits safe and sound at home. He bought the 442, (which stands for 4-barrel carburetor, 4-speed, and dual (2) exhaust), when he was discharged from the Army in 1970. After driving tanks around the Vietnamese jungle at an anemic top speed of around 20 miles per hour, the brutish power of the 442 was a welcome change.

Glatzer joined Prodigy in 1986 after an 18-year career as a marketing executive for Sears Roebuck and Company. Not surprisingly, one of his positions while at Sears was as the head of their automotive division where he was heavily involved with the marketing of "Diehard" automotive batteries. At Prodigy, Glatzer headed the consumer marketing and commercial marketing groups before being named executive vice president operations in 1991. In January of 1992 he was promoted to president of the popular service and then to CEO as well, a short two months later.

Prodigy Services Company, 445 Hamilton Avenue, White Plains, New York, 10601; (800)PRODIGY voice; (800)776-3449 voice. ♦



Fred Clark, 39, president and CEO of Clark Development Company, Inc., makers of PC Board bulletin board software finds relaxation riding the mountains and deserts of Utah on dirt bikes and all terrain vehicles. The ATV pictured is a 1994 Yamaha Warrior with a 350cc engine. Clark purchased his first dirt bike, a 250cc Husqvarna - one of the first to be sold in the United States, in 1973 and began riding the enduro circuits in Texas, New Mexico and Oklahoma.

Born on a farm in rural Wisconsin in 1945, Clark attended the General Motors Institute in Flint, Michigan where he earned a bachelor's degree in mechanical engineering. In 1968 he joined the Air Force where he became an instructor pilot on T-38 jet trainers and later advanced to teaching other rated pilots how to become instructor pilots.

After leaving the Air Force in 1973, Clark returned from a leave of absence with General Motors and went to work as a District Service Manager with the Buick Motor Division in Salt Lake City, Utah. In 1982 he was transferred to the Chicago area and after a short six months he left Buick because the windy city just didn't suit him.

Back in Utah, Clark went to work as a service manager for a heavy equipment dealer where he computerized their job control system on an Atari 800 with two floppy drives and a printer using \$5000 out of his own pocket. After two months of using the system a \$600,000 a month loss was turned around to a \$750,000 per month profit - yet he was still laid-off on a seniority basis when the company hit tough times.

Next he found himself working for a car dealer in Salt Lake where he noticed the need for an effective Finance and Insurance loan calculation program. When the program was completed it quickly

Frank LaRosa, 29, president and CEO of Searchlight, a bulletin board software company, finds himself on two wheels these days after letting his ex-girlfriend keep the 1995 Plymouth Neon the two purchased earlier this year when they broke up. The break-up was in no small way connected to the industry which is his livelihood.

While at ONE BBSCON this year in Atlanta, Georgia, LaRosa already knew Zanne Marie Gray to be a respected Searchlight sysop and co-author of a popular RIP chatting door titled "F.R.E.D." What he didn't know was that he would fall in love with her. Through the weeks that followed the convention a romance exploded in a flurry of e-mail and interactive sessions culminating in his existing girlfriend moving out and ultimately LaRosa becoming a two-wheeled commuter, riding three miles everyday to the Searchlight offices on Cleveland's west side - which isn't necessarily a bad thing. He said

that while his bicycle doesn't have as much horsepower as the Neon, he is making a dent in his "computer hacker gut."

Searchlight, 6516 Detroit Avenue, Cleveland, OH 44102, (800)988-LITE voice; (216)631-9290 voice; (216)631-9289 fax; (216)631-9285 BBS. ♦



spread to other area dealers where the need for communications software between Clark and others using the program for technical support and updates became apparent. He wrote the communications software and the rest is history.

Clark Development Company, Inc., 3950 South 700 East, Suite 303, Murray, UT 84107-2173; (801)261-1686 voice; (801)261-8987 fax. ♦



Jim Maxey, 48, president of Event Horizons, Inc. cruises along that other, older highway in a 1990 Lexus LS 400. The flamboyant Maxey has a wide array of interests including astronomy, photography, skiing, tennis, getting lost on long or short drives, getting high around the fireplace, writing science fiction stories, watching movies and running a successful private investigations firm - because he never found a PI he liked or felt he could trust, Maxey said.

He holds a bachelor's degree in Journalism from the University of Kansas, and has worked as a radio disc-jockey, an assistant chief engineer at a television station and a television news reporter before starting Event Horizons in 1983. According to Maxey: "I am not politically correct and wouldn't want to be anyway. Who wants to be? The idea I think, is to live your life like it's ending next week, with a little planning here and there." This outgoing style prompted him to also state: "I have an uncanny ability to put my foot in my mouth but it's beginning to taste, well, not so bad. At least, I'm getting used to the flavor these days."

Event Horizons, Inc., 311 Avenue B, Suite 209, Lake Oswego, Oregon 97034, located in the Frazier-Durham office building; (503)697-7700 voice; (503)697-5100 BBS. ♦



Philip L. Becker, 48, president of eSoft, Inc., and author of the *Que Introduction to PC Communications* - a popular book about computer communications, doesn't for a moment forget how he got to be behind the wheel of his late model red Mitsubishi 3000 GT VR4, or his black Nissan 300ZX, (both with twin-turbocharged engines), as the cars sport license plates touting his company and product, "TBBS" and "eSOFT," respectively.

The pictures were taken at the entrance to Colorado's world renowned Red Rocks amphitheater, a fitting setting considering Becker just finished a 2500 mile Grand Touring event seeing the sites of the Southwestern U.S., in New Mexico, Arizona, California, Nevada, Utah and western Colorado.

After graduating from Vanderbilt University with a bachelor's degree in electrical engineering, Becker worked as a top 40 disc jockey and rock'n'roll keyboardist for a short while before going to work for the aerospace giant, Martin Marietta as an assistant systems analyst in 1971. At Martin, Becker's work on the Apollo Moon mission and the Viking Mars Lander software won him numerous awards and fueled his fanaticism for reliable, high-performance software.

During his employment there, he designed the first multi-user operating system, an automated test system and compiler language, the Viking Mars Lander's system's test language, several high speed data acquisition systems, their first microcomputer project in 1976, the first microprocessor communications front end used by Martin, as well as co-designing several flight communications systems. In 1982, Becker left Martin to work as a consultant.

Adam Hudson, 22, author of the shareware BBS software QuickBBS in 1986 when he was just 14 years old, is now a programmer for eSoft, Inc. Adam prefers refined American muscle for getting him around. He purchased his 1992 5.0L Mustang with funds he received for selling the rights to the QuickBBS software in 1989.

Hudson joined the eSoft team in 1990 where he has been involved in developmental work on the TBBS v2.3 release and various eSoft products. Hudson also works as a contractor for the U.S. Olympic Committee, and Goodwill Games, Inc., (a division of Turner Broadcasting), maintaining their online information services for media information. When he is not busy at eSoft's Aurora, Colorado offices, Hudson enjoys drinking beer. ♦

As a consultant he designed and implemented an X.25 controller for Telefile Computer Mainframes, and a multi-channel asynchronous controller for TCP. He was also involved with founding Clancy Systems, Inc., a development company whose most notable accomplishments were the design of a communications system for parking tickets, the design of a printer to be used as a hand-held ticket writer and for co-designing Hertz Rent A Car's Instant Return System.

In 1980, Becker said he was basically pushed into writing TBBS, (The Bread Board System), by friend Dave Ebert. Ebert ran a BBS on a TRS-80 which he insisted Becker call. Becker, "a confirmed mainframe chauvinist" said, "I didn't think micro-computers were anything but toys," rapidly changed his views after calling the system. With Ebert acting as a driving force, Becker began work on a manual for BBS software, if it existed, and wrote the software out of that, adding that he always writes software in this way, (with the manual coming first), to be sure that as a programmer he doesn't cut any corners when actually developing the software.

In 1984, Becker formed eSoft, Inc. to market and support the software. Today, TBBS is one of the largest selling commercial computer bulletin board systems in the world, with over 10,000 installations in over 28 countries world wide.

eSoft, Inc., 15200 E. Girard Avenue, Suite 2550, Aurora, CO 80014; (303)699-6565 voice; (303)699-6872 fax; (303)966-8222 BBS. ♦





Andrew Milner, 24, managing director of Wantree Development P/L, makers of Remote Access bulletin board system software, finds a truly superior automobile in his 1987 BMW 318i - what he calls, "...the most reliable car I've ever owned." Born in London in 1970, Milner attended Kings College school until he was 12 years old, when he moved to Australia where his parents were from.

Throughout his early teens Milner developed a keen interest in computers with his Commodore 64 which sprouted to the online world in 1987, his last year of high school. Attending Curtin University of Technology in Western Australia for a bachelor's degree in business and information systems, he started his own BBS in 1988 with 30

megabytes of storage and a 2400 bps modem. While he liked the BBS software packages available at the time, he felt there was room for improvement so he set out to write his own.

On January 25, 1990 version 0.01 of Remote Access was released, an event which, at the time, Milner didn't think much of. But within a short time, Milner was inundated with requests from people who not only wanted to use his software but were willing to pay for it too. Later that year he incorporated his first business, Continental Software.

After graduating college in 1991, he moved to Luxembourg for two and a half years where he traveled around England and continental Europe working with others and making valuable business contacts that would later serve as a rather complete distribution network for Remote Access.

When version 2.0 was released, Milner adopted the banner of Wantree Development and moved to Clearwater, Florida where he continued working on the Remote Access software and other projects. He returned to Australia this past September where he continues work on Remote Access and where he finds time for his other hobbies, including: movie-watching, reading and sky diving.

Wantree Development, Andrew Milner, P.O.Box 603, Claremont 6010, Western Australia; +61-9-385-3315 voice; +61-9-385-3350 fax; +61-9-385-3359 BBS. ♦

Jeff Woods, 28, president and CEO of deltaComm Development, Inc., is constantly reminded of the cornerstone of his company whenever he looks at the "TELIX" license plate of his 1992 red Chrysler LeBaron convertible. The popular Telix communications software for Windows supports two scripting languages and RIP graphics.

As a child, Woods was the kind of youngster who was always taking things apart to see how they worked. When he was 17 years old, he started putting things together - one of his first accomplishments was BBS software for the TRS-80 which he wrote in Interpreted Basic. In 1990, Woods was working for Exis, Inc., the original owners of Telix, and bought the copyright to the software in September 1992, when he moved operations from Toronto, Ontario to Cary, North Carolina.

deltaComm Development, Inc., P.O.Box 1185, Cary, North Carolina 27512; (800)859-8000 voice; (919)460-4556 voice; (919)460-4531 fax; (919)481-9399 BBS, Internet: ales@delta.com. ♦



Dwight

Jones, 50, raised in Quebec City, Canada, was educated at McGill, Simon Fraser and Berkeley in Physics, Philosophy and Life Sciences. He began a business career in 1970 with a garage and body shop and later a sporting goods business, and moved into a computer career in 1987, when he started a TBBS bulletin board. One day another sysop asked him if he knew of a deal for upgrading to a 60 MB hard disk, this query led to an "accidental empire," according to Jones, with \$20 million in computer hardware sales through 1992.

His current firm, Imagen, Inc., began as an in-house development of Fractern, the first communications program to offer photo-imaging. Currently in the works, Jones and Imagen are completing their RTC technology, targeted to provide World Wide Web "Home Page" functionality to BBS sysops and Web servers.

He is pictured on his 1951 Massey-Harris tractor which he calls "Big Red." While he says the tractor is "not useful for much," it is great at dragging wood out of the bushes on his 10 acre property located on Salt Spring Island in British Columbia.

Imagen, Inc., Dwight Jones, 504-1168 Hamilton Street, Vancouver, B.C. V6B 2S2, Canada; (604)537-1950 voice; (604)537-5820 fax. ♦





Jim Harrer.

36, founder, president and CEO of Mustang Software, Inc., of Bakersfield, California, gets to and from the Mustang campus-like headquarters in his 1993 midnight blue Lexus SC400. Working an average of 65 hours every week, Harrer finds little time for driving his car, or his other interests including scuba diving, tennis, snow skiing and music.

Besides running Mustang, Harrer is also the Chief Technical Officer. A self-taught programmer, he wrote versions one, two and

three of the Mustang software himself and he continues to be directly involved with the technical directions his programming staff pursues. ♦

Mustang Software, Inc., P.O. Box 2264, Bakersfield, CA 93303; (805)873-2500 voice; (805)873-2599 fax; (805)873-2400 BBS.



Greg Hewgill.

24, senior engineer for Mustang Software, Inc., is especially proud of his 1991 silver Acura NSX sports car as is evident by the posters of the car in his office. Hewgill is a 1992 graduate of the University of Victoria, Canada, with a double major in mathematics and computer science. Hewgill has been writing shareware software since 1989 and is best known for his SLMR (Silly Little Mail Reader) QWK mail reader.

With Mustang since January of 1992, Hewgill has been involved with Wildcat! 4.0, OLX, Qmodem Pro for Windows and developed wcCODE. When he is not busy programming, he enjoys snow skiing most of all. ♦



Rick Hemming

44, vice president and partner with Harrer, is in charge of technical support, corporate communications, product production and non-technical aspects of product development for Mustang Software, Inc. Hemming covers the gambit of road machines with a red 1993 Mazda RX-7 twin-turbo and a 1994 black AMC Hummer equipped with a roof rack, ladder, power everything and "run flat tires."

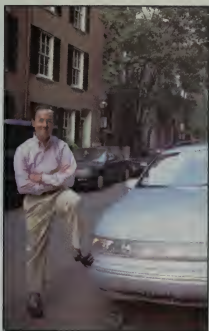
Hemming first entered the computer industry in 1984 as a hobbyist and co-founder of Bakersfield's IBM PC users group and later acted as a PC consultant throughout central California. He met Harrer while browsing the software section of a local bookstore leading to the eventual development of the Wildcat! BBS. When he is not behind the wheel of one of his two vehicles, Hemming enjoys snow skiing, collecting antiques and traveling. ♦

Scott Hunter.

27, vice president of engineering for Mustang Software, Inc., gets to wherever it is that he is going in a hurry in his 1994 Toyota Supra, with an inline six cylinder twin-turbo engine producing 340 horsepower. He is responsible for supervision and coordination of the program development teams for all of the company's products.

He and Harrer have known each other since 1985 when he was part of a long-distance programming team for the Colossus BBS. Besides driving his road-rocket, Hunter is an avid basketball and football fan. ♦





Frank Manning 46, president and CEO of ZOOM Telephonics, manufacturers of high-speed modems and other products designed to link people and their computers to the telephone network, stands in front of his late model Mercury Sable station wagon. Living on Beacon Hill in Massachusetts, there is very limited parking - street only, and moving the car for snow plow days can become quite the hassle. In fact, for years Manning did not have a car at all, instead he took taxi cabs or rented a car when he needed one and even now both he and his wife, Alecia, walk to work. He finds the car a great help when shopping for groceries on the weekends, visiting friends or relatives, cross-country skiing weekends or visits to the ocean. The Sable is ideal, he says, because it is roomy enough for skis and luggage and it is expected to be a big help when carting around their new baby, Rebecca, born Sunday, November 20 - the couple's first child.

Manning holds a BS, MS and PhD in electrical engineering from MIT where he was a National Science Foundation Fellow. His doctorate thesis, (with accompanying patent), described a way to make self-repairing computers and other advanced machines out of low-cost "cellular arrays" of identical chips interconnected on a semiconductor wafer. He co-founded ZOOM Telephonics in 1977 and began shipping modems for personal computers in 1983. ZOOM is one of the fastest growing fax/modem companies with 1993 sales of \$55 million. Going public in 1988, ZOOM stock is traded on NASDAQ and has ranked in *Forbes'* top ten list of best small public companies in America two years in a row.

ZOOM Telephonics, Inc., 207 South Street, Boston, MA 02111; (617)423-1072 voice; (617)423-9321 fax. ♦

John Wiley, 32, president and co-founder of Supra Corporation, manufacturers of high-speed modems since 1985, finds pedaling a preferred method of transportation much of the time. Wiley's hobbies include photography, sports, fishing, hiking and of course, bicycling. Three years ago he rode his bike on the 200 mile Seattle to Portland (STP) ride, (bicycle tour), a 14-hour grueling experience that he doesn't intend on repeating anytime soon.

Eighteen months ago, he and his wife, Terri, were blessed with son, Chad, who occupies most of his free time. Today Wiley prefers taking Chad with him on hour long bike rides after work on his Schwinn Sierra 18-speed mountain bike.

In 1982, Wiley and a college friend modified an existing modem to work with an Atari computer. From these humble beginnings sprang what is today Supra Corporation, and he attributes a large portion of their success to a "systems approach" - including not only a modem but cable, software and online offers with every purchase.

Supra Corporation, 7101 Supra Drive SW, Albany, OR 97321; (503)967-2410 voice; (503)967-2401. ♦



Scott Brinker, 23, president and CEO of Galacticom, Inc. of Fort Lauderdale, Florida recently upgraded his transportation system from a Mazda Miata to a Mitsubishi GT-3000 VR-4 with twin turbochargers and 320 horsepower. Besides driving his little red racer, Brinker finds enjoyment in being a contemporary songwriter and independent recording artist playing the keyboards, which are naturally wired to a computer.

Brinker was Galacticom's second customer in 1986 running The Major BBS software on his entertainment BBS - Moonshae Isles. Since then, he gained early admission to the University of Miami studying music synthesis, computer science and sociology. Brinker said, "I think what attracts me to music is the same artistic spirit that I find in running Galacticom: the drive to create products (or songs) that have meaning and enjoyment for the audience. In a way, that's what the entire BBS industry is all about: human expression and interaction."

Early in 1990, Brinker started his own company titled Galactic Innovations, Inc., a third party developer of Galacticom compatible products. After a short eight months in business, company revenues rocketed from \$25,000 to \$250,000 resulting in a merger between his company and Galacticom and placing him in the position of vice president. In November of 1992 he was promoted to general manager and in March of 1993 to president and CEO.

Brinker's other interests when he is not busy behind a keyboard include: landscaping, sailing, Oriental cooking and chess.

Galacticom, Inc., 4101 SW 47th Avenue, Suite 101, Fort Lauderdale, FL 33314; (305)583-5990 voice; (305)583-7846 fax; (305)583-7808 BBS. ♦



Jack Rickard, 39, editor and publisher of Boardwatch Magazine, is known for his colorful and insightful editorials as well as his 1994 dark green AMC Hummer. The vehicle has a 12,000 lb. chromed Warn winch, chrome wheels and bumpers, power everything, keyless entry and a 1,000 watt JVC stereo which Rickard is renown for playing the same song over and over and over again at ear-splitting volumes.

Rickard first started publishing Boardwatch in March of 1987 as a newsletter and has since nurtured it to one of the largest and most respected publications covering the online industry.

Boardwatch Magazine, 8500 W. Bowles Avenue, Suite 210, Littleton, CO 80232; (800)933-6038 subscriptions; (303)973-6038 voice; (303)973-3731 fax; (303)973-4222 BBS. ♦

Brian Gallagher, 29, assistant editor of Boardwatch Magazine, has been known to ride his 1991 Rans recumbent bicycle the 10 miles it takes him to get to the Boardwatch offices. The bicycle, which he calls "Rozantine," was built from a Fischer cross-mountain bike, which he wrecked, and the aircraft aluminum Rans recumbent frame. The bike weighs 31 lbs., has 18 gears and uses two and a half standard bicycle chains linked together. "While the bicycle isn't much on cornering," he said, "it sure is fast."

When he is not busy writing, interviewing, or editing, Gallagher spends his time with Karen Downing, his significant other, reading, flying kites and styrofoam gliders, writing songs or singing in his rock'n'roll band, "Skin Drifters" - his sister Denise plays rhythm guitar in the project. ♦



Charlie Moore, 42, art director for Boardwatch Magazine, besides most of the covers and computer art in the magazine, Moore is known for his tongue-in-cheek reviews of various promotional items at the magazine as well as his insightful, and often twisted view of the world at large featured in the "Teleconfusion" columns each month. He is pictured with THE test vehicle, a 1985 Isuzu Trooper, which he often uses to put products through the ringer.

Moore has been a commercial artist for over 20 years working in the aircraft and entertainment industries. Specializing in cartooning and aircraft renderings for Northrop, Hughes, JPL and other major Aerospace companies, his work can be seen in the National Air Museum and various publications. ♦

WEBWATCH by Jack Rickard

• COMPUTER MAIL ORDER WEB SITE

• VIEWS OF THE SOLAR SYSTEM VIA WEB

• MCI ANNOUNCES INTERNET ACCESS

• WORLD WIDE WEB TRAFFIC STATISTICS - 1814% EXPLOSION

• WEATHER WORLD ON THE WEB

• GET THE WORD ON THE WEB

• ROBOT ARMS, TELEROBOTIC CAMERAS AND COKE MACHINES



COMPUTER MAIL ORDER WEB SITE

One of the ongoing components of the personal computer industry from its inception was mail order discount houses offering software and hardware at significant discounts from "list" prices. During the late 80's there was virtually a war between computer dealers running small retail establishments and computer mail order firms. It remains an extremely competitive business and some of the larger firms offer literally thousands of different products.

One of the more innovative players in this game is a company called Computer Express. Unlike many mail order companies that are trying to gain an online presence, Computer Express started as an online entity. Philip Shier was an audio recording engineer in Santa Barbara California. His wife Lesley was a school teacher. In 1984, Philip began playing around on the SOURCE. When CompuServe started their Electronic Mail in February 1985, the couple started an online mail order operation on the service. Subsequently, they put up a store on GENie which actually predates and led to GENie's shopping area.

Today the company has shopping "mail" facilities on Prodigy (JUMP COMPUTER EXPRESS), CompuServe (GO EXPRESS), America Online (KEYWORD COMPUTER EXPRESS) and Delphi (SHOP COMPUTER EXPRESS) and according to Lesley Shier they are working on agreements with Apple's eWorld, Microsoft's Marvel, a new European online service, and will investigate almost any new online service for a fit. The company has 20 employees and something over \$10 million in gross annual sales. The company did branch out into more conventional print advertising some two years ago, but remains primarily an online sales organization.

We encountered them via their Internet version of the store. The company has set up a very usable

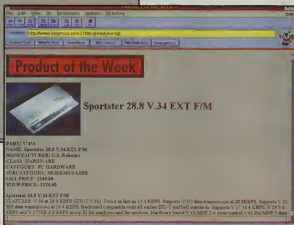
World Wide Web site at <http://cexpress.com:2700> beginning in August 1994. The striking thing about the web site is a searchable gopher index that allows searches of the 3000+ items the company carries. Simply key in a search word and it compiles a page of hits. You can then click on the hit for a very detailed product description, pricing, and part number. The presentation is very informative and usable.

Another link takes you to an order function where you can order the product. When we tried this, it linked us to a telnet session with a Sun UNIX machine, but no indication of what to enter at the login prompt other than an (enews) note on screen.

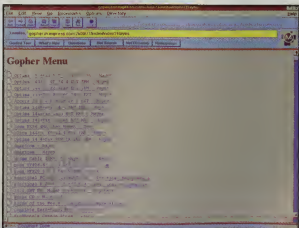
If you enter that, you go to the Electronic Newsstand, a completely different service but indicative of who is doing Computer Express' web server. The Internet Access Company is actually providing the service and apparently they do Electronic Newsstand as well.

Fortunately, you can also order by e-mail. Detailed instructions are available by sending e-mail to info@cexpress.com. You can even do a search of the database by e-mail by sending a search request to quote@cexpress.com and order by sending a message to order@cexpress.com.

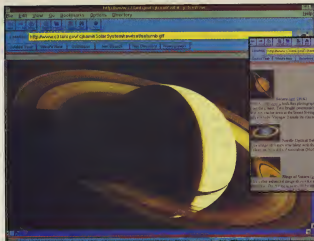
The key item here in online shopping is not having to shop. I don't really want to "shop" online. But occasionally we do have the need for a piece of hardware or software and to go to a computer store and listen to the moron of the week explain why we really want something different according to his current theory



Computer Express' online mail order <http://cexpress.com:2700>



Computer Express' searchable Gopher index



Views of the Solar System

<http://www.c3.lanl.gov/~cjhamil/SolarSystem/homepage.html>

Further demonstrating his impressive image processing skills, Hamilton also maintains a web page titled Views of the Solar System at <http://www.c3.lanl.gov/~cjhamil/SolarSystem/homepage.html>

This document purports to provide an educational tour of the solar system. We've seen such things before, usually cartoonish little tours of the nine planets and a few moons. Nothing of the kind here. This set almost represents the state of what is known and visible in our solar system and provides a good cross section of current knowledge on the topic.

The images are very well selected and presented and detail a solar system much more complex than that taught in the schools just 20 years ago. The Voyager space probes have dramatically increased our knowledge of the many moons of the larger planets. And the site not only presents images from the Hubble Telescope, Voyager, Magellan, and Viking spacecraft, but detailed information on the history of knowledge about each of the bodies from who discovered it to what is planned for future space shots such as the Cassini probe scheduled for launch in 1997.

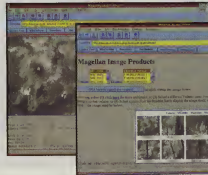
Detailed statistics on diameter, mass, density, orbit, atmosphere, etc. are also provided on the system.

And the site is kept scrupulously up to date. We viewed it on November 29th, and on that same day they had added images of Neptune's satellite NEREID, and Saturn's satellites PAN and ATLAS. New images were added to the Mercury, Venus, and Triton pages on 11/25 and Saturn's PROMETHEUS, PANDORA, EPIMETHEUS and JANUS were updated to include new information on 11/23/94.

The Titan Home Page was updated on 11/21 to include new Hubble Telescope images along with an MPEG animated video clip showing surface data mapped onto the globe and rotated as the moon rotates.

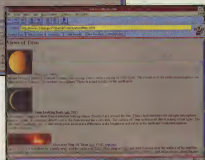
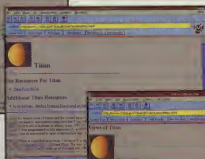
We learned Titan is the largest moon of Saturn and the second largest moon in the solar system after Jupiter's Ganymede. It was discovered by Christiaan Huygens in 1655. One of the Cassini spacecraft's missions is to launch a European-built probe titled the Huygens in 2004 for descent through Titan's atmosphere. Cassini will radar map Titan's surface during some 30 encounters.

We were also fascinated by the Magellan Spacecraft's mission to map Venus. This probe uses a synthetic aperture radar system to peer through the clouds of sulphuric acid and map the entire surface of Venus. Again, a surprisingly detailed volume of photo images was presented, virtually a database with some 127 volumes. You selected a volume, and an image containing ten thumbnail images appears on screen. You can click on one of these to get the larger picture.



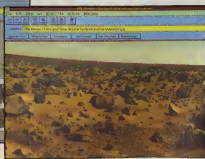
Detailed views of Venus Magellan

Interestingly, you can also click on any spot on the larger picture and an information display gives you the precise position on the surface of Venus that you indicated with your cursor.



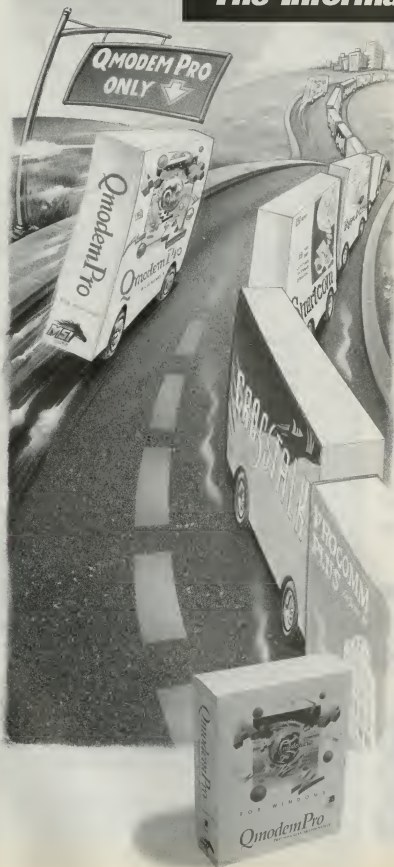
Jupiter's area featured an MPEG animation of the Levy-Shoemaker comet strike of last July, along with hundreds of images of Jupiter, its moons, and the comet encounter. On Mars we had the image of the now famous "face" along with actual photos of the Martian landscape taken by the Viking lander.

Overall, this is the most detailed repository of information and images on the solar system we've seen maintained online for the benefit of the public. At every opportunity to appear detailed and not actually be detailed, Hamilton has gone to the extra work to actually make the depth of detail live up to the pretty screens. As such, this is one of the best examples of use of the World Wide Web we've ever encountered. If Mosaic and World Wide Web constitute the Internet's "killer application" then this site should be listed as the scene of the crime. Stunning in all respects. Calvin J. Hamilton, CIC-3/CON, MS B265, Los Alamos National Laboratory, Los Alamos, NM 87545; (505)667-9344 voice; (505)665-5220 fax; cjhamil@lanl.gov



Mars Landscape Viking lander photo

Think Of It As The Fast Lane On The Information Superhighway.



QmodemPro for Windows by Mustang Software zooms past the competition. With no roadblocks in sight. This feature-filled, power-packed communications software makes it easy for Windows users to dial into BBS systems. It's the first program to support both data and fax communications from a single phonebook. With a modem that supports adaptive answering, you can receive both fax and data calls while in Host Mode, a limited-feature BBS program that lets you set up your PC to receive incoming modem calls. You can also send a fax directly from any Windows application using the QmodemPro for Windows printer driver. It's easy. It's all in one integrated package. And it's available now.

QmodemPro for Windows is the first Windows product to support RIPscript graphics, so you can plug into the thousands of BBSs offering graphics and full mouse support online. It also has more than 30 of the most popular terminal emulations, 10 built-in file transfer protocols including Zmodem, CIS B+ and Kermit, plus up to 40 programmable macro buttons. QmodemPro for Windows also lets you associate icons to each entry in your dialing directory, so you can create a true Windows phonebook. Each phonebook entry tracks up to 5 numbers, and groups of entries can be saved and dialed.

With QmodemPro for Windows, file transfers are made easy with features like drag-and-drop uploads from the Windows File Manager and live .GIF file viewing during downloads. The built-in .GIF viewer lets you zoom .GIF and .BMP files, or mark and copy portions of the picture to the Windows clipboard. You can put the Windows multitasking environment to work: use it to transfer files in the background while you work in your word processor or spreadsheet applications, or get in a few quick games of Solitaire. No other communications software does Windows like QmodemPro.

QmodemPro's new script language, SLIQ, gives you unparalleled power, speed and flexibility. With the AutoLearn feature, you can let QmodemPro record your scripts automatically without having to learn how to program. SLIQ scripts are compiled for fast, secure operation, plus we include a powerful script debugger and text editor.

QmodemPro for Windows also supports sound cards, so you can play your favorite .WAV file automatically when you connect to a BBS, and during other events like a successful fax transmission.

Whether you're a BBS beginner or a seasoned modem user, you'll find QmodemPro for Windows to be a flexible, easy-to-use communications tool, with twice as many features as competitive products. And at a better price: only \$99 retail. (DOS version also available)

If you want to get on the information superhighway, don't get stuck in the slow lane. Move ahead fast with QmodemPro for Windows by Mustang Software.

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*Take advantage of TOC rates and benefits
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Call for details! Time Online Connection also offers T1,
800 number, International, and Calling Card services.

(*) Interstate rates.

TOP TEN REASONS

“Why I missed *ONE BBSCON'94* ”

10. Got lost on the Information Superhighway.
9. Large exhibit booths frighten me.
8. Had to wash my (your choice).
7. Thought everyone was kidding when they said Atlanta.
6. Was driving through Memphis, saw Elvis wearing a white sequined glove, turned around and went home.
5. Didn't want to miss the series finale of *STAR TREK: The next generation*.
4. What's a ONE BBSCON?
3. Three words: GUI's, GUI's, GUI's.
2. My Mom wouldn't let me go by myself.
1. *WAITING FOR IT TO COME OUT ON VIDEO!*

Experience the online event of the year..
ORDER YOUR VIDEO TAPE NOW!

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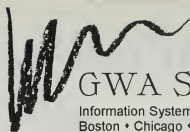
Credit card # _____ Exp date _____

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Attention SYSOPS: Residual Income Opportunity!

If you could receive a check every month - - for helping BBS users **SAVE MONEY** on a service they already buy, without sacrificing any quality; would you be interested?

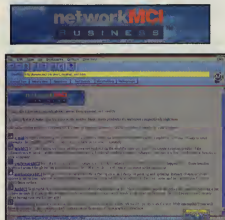
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MCI ANNOUNCES INTERNET ACCESS

The landscape of Internet Service Providers is changing dramatically as we watch. Perhaps it needs to. In following the Internet over the past few years, we've become convinced of two things: there aren't nearly as many people ON the Internet as are widely claimed, and secondly that there ARE that many people who would LIKE to be. But getting connected requires an inexpensive account with a local service provider, and a bit of a learning curve in getting your PC configured to connect to it.



MCI's home page
<http://www.mci.com>

On November 21, MCI Telecommunications Corporation's Business Markets Division announced an entire range of Internet services from 28.8 kbps SLIP/PPP accounts up through 155 Mbps Asynchronous Transfer Mode (ATM) links, as well as an Internet "Market Place" allowing vendors to present their wares to the Internet cognicetti. It looks to be the most ambitious Internet service rollout we've seen.

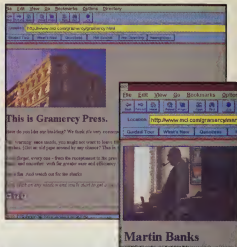
It is not precisely accurate to portray MCI's participation in Internet services as new. The original 56 kbps ARPAnet was scheduled to have the plug pulled in 1990. In 1987, the National Science Foundation funded a new 16-node T1 network backbone operating at 1.544 Mbps termed the NSFNet backbone. They contracted with an entity at Michigan University titled Merit to operate this backbone. Merit subcontracted much of the work to a new company titled Advanced Network and Services (ANS) that was actually a cooperative venture between IBM and MCI. This structure still operates the

NSFNet backbone though in 1992 it was upgraded to a 13-node DS3 backbone at 45 Mbps. But the NSFNet backbone was scheduled to go away this past November and at some time it is still supposed to be retired. This poses some anomalies in who and what the Internet structure will become.

For example, America Online, a commercial service provider in near hysteria to not be left behind when the Internet ship sails, announced it had purchased ANS, as well as a Mosaic Browser software company titled Bookline. It may not have purchased much as a good bit of the expertise at ANS has already jumped ship - much of it to MCI.

MCI is rolling out its own Internet service offering titled internetMCI. Notably, the MCI Internet Network is entirely a T3 backbone operating at 45 Mbps with links to some 400 locations across the United States. They claim some 35,000 route miles of advanced fiber-optic and digital radio links and some 4.5 million circuits. And they've already announced an upgrade of that network to 155 Mbps starting mid-1995. This is sufficient bandwidth to transmit a 90 minute movie in about 3 minutes or 10,000 pages of text in a second. Dr. Vinton Cerf, widely known as the "father of the Internet" because of his work with a team to develop TCP/IP at UCLA in the late 1960s where he received his PhD in Computer Science, he is now senior vice president of data architecture for MCI's Data Services Division and directs MCI's Internet initiatives. Cerf had actually worked with MCI earlier from 1982 to 1986 as the chief engineer in designing MCI Mail with the MCI Digital Information Services group. The current Data Services Division, located in Dallas, was established in August 1993 to consolidate MCI's data development, marketing, and operations resources.

Perhaps more significant is the bevy of connections MCI brings to the table. It already serves as primary Internet carrier to a host of regional Internet Service Providers including BARRnet, CInet, CSUnet, JVNnet, Los Nettos, Merit, MICHnet, MIDNet, NEARnet, NorthWestNet, SURAnet and Sesquinet representing as much as 40% of Internet traffic now. They've also announced connections to Canadian CA*net and the Japanese WIDE network.



MCI's Gramercy Press offices
tour through their "offices"

The company has already begun a national television advertising program showcasing Gramercy Press, a publishing company. They operate a World Wide Web home page at <http://www.mci.com> with information about MCI's Internet services and a link to Gramercy Press. The Gramercy Press page shows a photo of a corner office building. By clicking on a window you can dive into an employee office and find out about them, send them e-mail, read their e-mail, blow up photos hanging on the wall, or go out into the hall and wander into someone else's office. The effect is quite dramatic. And it probably represents the best effort we've seen at conveying the advantages and uses of Internet access for companies. But it is causing some problems. Gramercy Press is entirely fictitious and no such company actually exists. But one of the features offered was the ability to submit manuscripts online. As it so happens, many Internauts unaware that it was not an actual publishing company, began to do so. As a result, Timothy F. Price, president of MCI Business Markets, has

announced that they will activate the site to actually publish, at least in electronic form on the service, submitted art, poetry, and short stories.

MCI is offering a range of connection options from 28.8 kbps SLIP/PPP to ISDN, frame relay, and Asynchronous Transfer Mode (ATM) at 45 Mbps. Dedicated links include DS0 (56 kbps leased line), T1 at 1.544 Mbps, T3 at 45 Mbps, and fractional T3. By mid-1995, access will be available via MCI's HyperStream Switched Multimegabit Data Service (SMD) and via MCI's HyperStream ATM.

We found several of the connection options pretty interesting. Dedicated service to connect a LAN or BBS to the Internet includes DS0 (56 kbps leased line service) priced at \$1000 per month - which does not include a leased line to MCI's point of presence. A 1.544 Mbps T1 link is \$2300 per month with a \$300 installation fee, again plus the line to the MCI POP. This compares very favorably with Sprint's listed port charge of \$2700.

Perhaps the most exciting product announcement is the local dialup accounts. MCI is introducing a package of software including the Netscape Network WWW Browser we raved about last issue with the TCP/IP stack from FTP Software at \$49.95 for the package. They also offer the same package with ftp, telnet, and ping as the "Power Upgrade" package at \$59.95. But notably they also offer fairly reasonably priced SLIP/PPP accounts at 28.8 kbps speeds. They intend to roll this service out late in January with local dialup numbers in the top 28 metropolitan areas in the country at \$19.95 per month for 7 hours of connect time - with additional hours priced at \$3.00 per hour. For those outside the 28 cities, they will provide an 800 number and the \$19.95 per month gets you 3 hours of connect time with additional hours at \$7.00 each. The service won't be available until the end of January, but oddly, if you sign up before the end of 1994 for the service, you can get unlimited 800 number access for the first 90 DAYS of service at \$19.95 per month. And according to John Houser of MCI, they have planned adequate capacity to meet demand for the service. We'll see. Contact (800)779-0949 to sign up for the SLIP/PPP accounts.

MCI has plans for quite an array of connections via ISDN, Frame Relay, Switched 56, and so forth but are a little vague on specifics at this point.

The company has big plans for a WWW online mall they call marketplaceMCI. MarketplaceMCI purports to be a new venue for electronic commerce and interactive marketing on the Internet. The mall will include "storefronts" allowing consumers and businesses to purchase merchandise and services. Using the RSA data encryption facilities provided by the Netscape Navigator, as well as their server software, Netsite Commerce Server, the mall will provide secure credit card transactions. Users can also make multiple purchases from various vendors on the mall, and effect a single credit card transaction from the mall "cashier" to pay for all of it. MCI had 1993 revenues of nearly \$12 billion. MCI Telecommunications Corporation, Business Markets, MCI Center, Three Ravinia Drive, Atlanta, GA 30346

WORLD WIDE WEB TRAFFIC STATISTICS - 1814% EXPLOSION

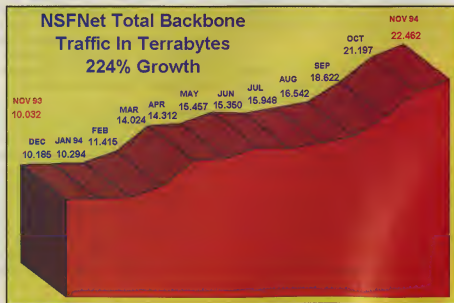
Interest in the World Wide Web and Mosaic-like navigators and browsers is increasing dramatically. And hundreds if not thousands of corporations and institutions are rushing to put up a fruit stand on the information superhighway. And they are nearly hysterical to determine how many people are "on" the net. We've seen very few credible numbers. We're pretty sure there aren't a fraction of the 20-30 million users touted, but it is menacingly difficult to determine just how many there ARE. Clearly, it is growing phenomenally. But what it is growing from and what it is growing to is more difficult.

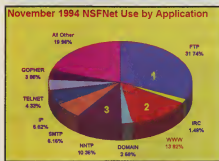
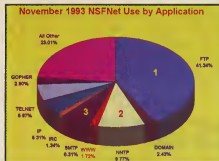
We had a sense of sudden growth in October while working on our December issue. It seemed web site announcements and press releases where piling up on our desk faster than we could type. And the trend has continued through November and into December. So we thought we might at least look at some network traffic statistics to see if we were dreaming all this or if it was actually happening.

Merit is the entity contracted to maintain the National Science Foundation backbone network or NSFNet. For a number of years they have maintained some very interesting historical data at their Network Information Center host computer. These statistics are available to all at <http://nrc.merit.edu/nsfnet/statistics>.

It is important to note that these traffic studies do NOT represent all traffic on the Internet. Indeed, at this point they likely don't represent most of it. Traffic within a local region can easily move from one location to another without ever transiting the NSFNet backbone at all. Further, the growth of commercial networks such as Sprint, MCI, Netcom, PSI, and others has moved vast amounts of national network traffic off the NSFNet backbone and onto these private backbones. Over the period we are examining, this was not only a trend, but an accelerating trend. Still, backbone traffic provides a roughly representative sample and is indicative of relative trends between applications - which is most of what we're looking for.

We decided to look at the most recent year available - November 1993 through November 1994 (13 months actually) month by month. The first





notable thing was that despite the move OFF the backbone, backbone traffic in bytes still more than doubled. In November 1993 some 10,032,250,470,650 bytes were passed via the backbone or 10.032 Terrabytes (10 to the 12th power or thousand billion). A year later in November 1994 backbone traffic had grown to some 22,462,439,417,900 bytes or 22.462 Terrabytes.

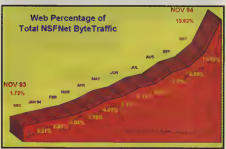
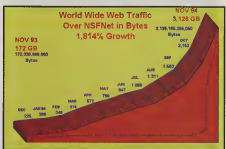
Against this background doubling, the effect of Web traffic is notable. First, our timing isn't bad. The web was really an Internet backwater prior to the development of NCSA Mosaic - the graphical interface that made the game interesting. This was coincidentally first released for Windows in November of 1993. October 1993 was the FIRST month where web traffic exceeded 1% of backbone byte traffic. And in November 1993 Web traffic was the eighth most byte intensive application at 1.718% of web traffic. It actually trailed domain name service lookups in activity. The largest byte eaters were the file transfer protocol or FTP with 41.337% of all byte traffic on the backbone. Usenet News uses the Net News Transfer Protocol or NNTP to carry thousands of public message conferences and it was a distant second with 9.774% of the total. Simple Mail Transfer Protocol came in third with 6.307% of the total to deliver private e-mail. Telnet was fourth. Gopher far exceeded WWW in activity during this month.

One year later, WWW had moved from eighth place to second. FTP had fallen nearly 10% to 31.743% of the total. And WWW had risen to an astounding

13.917% of total traffic. Virtually everything else held position very closely. NNTP had actually risen a smidge to 10.346%. Gopher too had risen from 2.902% to 3.860%. But in general the breakdown of applications across the network had held fairly constant. The two main changes were that FTP had fallen somewhat dramatically, and WWW had risen to eighteen times its original value. WWW byte count in November 1993 was some 172 GB but by the same month in 1994 it had grown to 3126 GB. And it very nearly TRIPLED from July to November of 1994 and DOUBLED from September to November of 1994.

Imagine what would happen with this astounding growth if it were to continue for the next year. If total backbone

56,000 domains. One perplexing but interesting subsets of these statistics is PINGable hosts. PING is a simple program that uses the ICMP protocol to send a signal to a computer that in turn responds to the ping - and you can even "time" the echo - much like the ping of an underwater sonar device and hence the vernacular term PING. If a computer can't respond to a PING, it is unlikely to be able to do anything and in fact, PING is used to determine if a machine is up and on the Internet at all. Lottor runs a program to attempt to PING 1% of the counted hosts and from these results extrapolate the percentage of host computers actually connected to the Internet. Currently, he calculates about 27% of the listed hosts are actually PINGable or 1,024,000 machines.



traffic grows by the same 2.24X factor, it would carry some 49 Terrabytes per month by November of 1995. And if Web traffic grows by the same 18X factor, it will account for some 56 Terrabytes by itself - more than the backbone. Obviously this won't happen, but it illustrates the growth of web traffic against an already doubling backbone traffic overall.

So WWW is it on the Internet. And measuring flows of data is interesting, but still perniciously difficult to translate to warm bodies. Mark Lottor of Network Wizards in Menlo Park California has been another numbers cruncher for some time. He counts the number of HOSTS on the network - that is, any computer with an IP address.

In October of 1994, Lottor estimated some 3,864,000 hosts on the Internet spread among 37,022 networks and

In any event, the figure people generally want is how many warm breathing bodies are "on" the Internet. Thus far, the answer rather depends on whether you use Lottor's PINGable number or the total number of hosts. Some hosts are behind "firewalls" and can't actually be reached from the Internet, though they can reach out to other sites on the Internet. Some of these "hosts" are simply dynamically assigned IP numbers used for SLIP connections and so forth.

The other factor is how many people are there per host on the Internet. Some systems have thousands and tens of thousands of people on a computer that has a single IP address and access to the Internet. On the other hand, many of them aren't aware of it and don't use it at all. And further, there are a lot of computers out there running around without any people at all. Our 199.33.229.6 machine is surely counted, but it is actually a web server. Our .254 is likewise a dummy to shuttle telnet connections to our BBS. And so it goes. We've easily got 10 IP numbers connected to PINGable machines, but no humanoids actually use these as terminals.

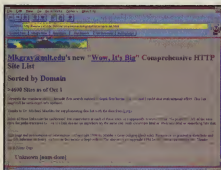
But if you assume Lottor's higher number of 3.8 million hosts and grab a number between 7 and 10 representing a guess at the number of people per computer, you could derive the 30 million users number pretty easily. You would have to pull the 7-10 number pretty much out of the air, but it would get you there.

The only person we know of who has spent some methodical effort at determining this is John Quarterman. Quarterman actually wrote what we consider the first published "book" on the Internet and related networks titled

The Matrix: Computer Networks and Conferencing Systems Worldwide. He's authored several other books, most recently **Practical Internetworking with TCP/IP and UNIX** with Smoot Carlmitchell. And he's Senior Technical Partner at Texas Internet Consulting and publishes a newsletter titled **The Matrix News**.

Early in 1994, Quarterman called out an e-mail survey form mailed the "Internet Demographic Survey" to 4751 postmasters at various sites and received 662 responses or 13.9% back. From this survey, he believes the factor of people to computers to be about 3.5:1. This method is just shy of being airtight as respondents self-select rather than using a statistically representative sample. But it's the only factor generated by ANY methodology we're aware of and so it thereby stands head and shoulders above the prior wishful thinking guesstimates.

On Lottors low number, this would indicate some 3,584,000 people could commit Interneticisms were they so inclined. And on his higher number, this 3.5 factor would render some 13,524,000 warm bodies. The concept of a 3.5 million plus or minus 10 million number makes us a little queasy. A nun review of our work here could turn ugly on us. But it's where we are. Quarterman leans toward 3.5 million on the realistic low side, but is very persuaded that that many again are living behind firewalls and could reach out and touch someone at any time for a total of about 7 million.

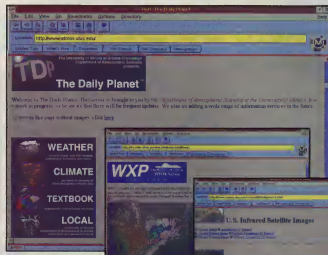


Matthew Gray's "Wow, It's Big" comprehensive HTTP site list

For more on numbers, we might suggest Lottor's web site at <http://www.nw.com>. Aside from numbers, it has a link to Matthew Gray's "Wow It's Big Comprehensive HTTP Site List" in Cambridge Massachusetts. This is actually available directly at <http://www.mit.edu:8001/fafs/sibp/user/mkgray/hucompre.all.html>. This is a 325 KB HTML file listing some 4600 web sites around the world. If you save this file off, you can simply load it

at any time from Mosaic and click yourself into a coma.

Quarterman also has a web site up and running at <http://www.tlc.com>. And his Matrix News is available in electronic form by e-mail at \$25 per year or \$30 per year in printed form. Back issues are \$4 and the January 1994 issue - Volume 4, Number 1 contains the Internet Demographic Survey. Matrix Information and Directory Services, 1106 Clayton Lane, Suite 500W, Austin, TX 78723; (512)451-7602 voice; (512)452-0127 fax; email: jsq@tlc.com



WEATHER WORLD ON THE WEB

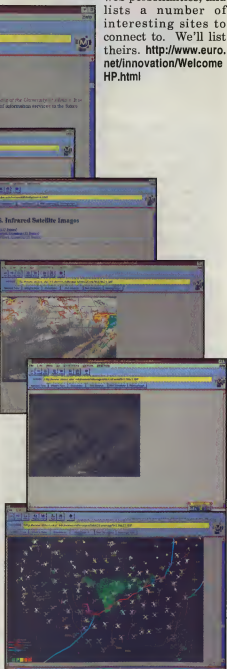
The University of Illinois at Urbana-Champaign Department of Atmospheric Sciences has put up a Web page we found graphically interesting. Of course, everyone is talking about it but nobody does anything about it. The top page is called The Daily Planet and it is available at <http://www.atmos.uiuc.edu>. One of the links is to an internal page called Weather World which provides an interesting array of weather images including black and white satellite visible image views, color infrared images, and some fairly detailed surface analysis/radar summary maps. The images are gorgeous, and they somehow cause weather to happen all over the country. This seems to be where the weather for the coming day is diagrammed, and in some obscure fashion, all the clouds and air pressure patterns all over the country then dance to this tune. Incredible.

Dr. Mohan Ramamurthy, Assistant Professor of Meteorology works this magic. David Wojtowicz is a research programmer who actually does most of

the work. And Dr. Robert Wilhelmson is the Interim Department Head of Atmospheric Sciences who sees that it gets paid for somehow. The site runs on some HP9000/ 700 workstations. It's a must see.

GET THE WORD ON THE WEB

The World Wide Web has spawned an electronic newsletter covering notable web happenings. It sports detailed interviews with some of the web personalities, and lists a number of interesting sites to connect to. We'll list theirs. <http://www.euro.net/innovation/WelcomeHP.html>



Satellite weather found on the Web - <http://www.atmos.uiuc.edu/>

ROBOT ARMS, TELEROBOTIC CAMERAS AND COKE MACHINES

Mark J. Cox is currently working on his PhD on remote and robotic access over the Internet at the Department of Industrial Technology, University of Bradford, in England. He and John E.F. Baruch presented a paper titled Robotic Telescopes: An Interactive Exhibit on the World Wide Web at the Second International Conference of the World Wide Web in Chicago this past October.

What we found interesting about Mr. Cox, is that he has a page-full of his favorite web haunts at <http://www.eia.brad.ac.uk/mark/lave-inter.html>. And his favorite things comprise a list of virtually every aquarium, robotic arm, automated camera, coffee pot, and coke machine on the planet with an ethernet connection.

There is a link to a camera that takes a photograph of an iguana every 10 minutes, an aquarium in Massachusetts, and one of a video camera that snaps a picture of San Diego Bay every half hour during daylight hours. Another shoots the Florida State University campus in Tallahassee. There's even a camera in Keio University in Japan.

We found the Active Badge system at Cambridge University fascinating. They have 200 Olivetti active badges and 300 location sensors in the area and you can take a look at a map of the location of everyone at any one time. There's a geiger counter in Texas you can peek at. There were at least six coke machines you could look at to see what the current stock levels are, including one in Australia. There's a k12 project to track wolves and the telemetry data from the wolves is plotted on a map. And Michael Witbrock has a site connected to an Amiga Computer that features a speech synthesizer. You can enter words for the machine to scream at his cat. There was a system where you could enter text and it would be scrolled across a scrolling sign outside the ACM offices. But it was shut down. Too many rude messages. The Tulsa Sheriff maintains a daily updated listing of inmates in its jails.

There was a whole list of automated telescopes, but none of them are automated as best we can tell. Some let you send requests for time and activity by e-mail. We think Mark just likes telescopes.

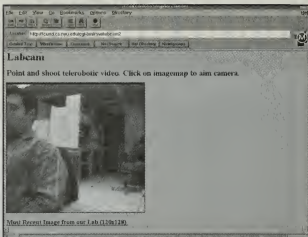
One that we looked at a bit more closely is the NYU Labcam. This is a point and shoot teletopic video scene of an actual computer lab. The original impetus seemed to be to collaborate with researchers in Moscow and it was proposed as part of the NASCAST program sponsored by Dr. Sergey M. Sokolov of the Keldysh Institute of Applied Mathematics. The Keldysh Institute couldn't afford a web server, so the visuals are effectively one way. But the lab also had some stuff stolen, and by setting up a camera that anyone on the net might be looking through at any time, the thievery part pretty much dried up.

The labcam was created by Professor Richard S. Wallace in Collaboration with Fred Hansen, Toto Paxia, David Max, Brett Porter. It went into operation on October 18, 1994.

On connecting to the Labcam, you can choose images in sizes of 120X128, 240X256 and 480X512. You aim the camera using a spherical pointing motor. The interface maps image coordinates to the pan-tilt angle of the camera. So to move the camera to the left, you simply click on the left side of the image. Each time you click the image, the camera repositions and snaps a shot which you then receive as an update. The camera itself is a matchbook-sized surface mount pinhole lens camera from Edmund Scientific - about \$200.

Another site we found fascinating was the Mercury Project. The Mercury Project resides in the basement of the University of Southern California's Powell Hall. It is a robot arm in a cordoned off sandbox which excavates in the sand, aims an air jet to blow away sand and debris looking for "artifacts" and has a video camera so the "operator" can see what they are doing. The project is actually an interdisciplinary cooperative between the anthropology department and the computer science department. Kenneth Y. Goldberg, assistant professor of computer science at the USC School of Engineering, and Michael Mascha, adjunct professor of anthropology, and a slew of graduate students breathed life into the arm.

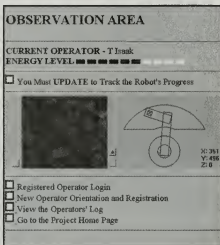
And thousands of Internauts have come in over the web digitally to make



NYU's Labcam
<http://found.cs.nyu.edu/cgi-bin/rsw/labcam2>

real sand fly. Would-be operators must first take a test to become "certified" before they can run the robot. The initial access is at <http://www.usc.edu/dept/raiders/story/index.html>.

The display shows both the video image seen by the camera, and a diagram of the arm and the field over which it can move. Buttons allow the user to move the arm up, down or to send a blast of compressed air into the sand to reveal what treasures may lie beneath. The system is driven by two Sun SPARCserver 1000's and a single Pentium PC. The actual robot arm is an IBM SR5427 SCARA arm, built around 1980. The camera is an EDC1000 Digital CCD camera from Elctrim, Inc. ♦



**University of Southern
California's Internet sand box**
[http://www.usc.edu/dept/raiders/
story/index.html](http://www.usc.edu/dept/raiders/story/index.html)

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PEOPLE ONLINE by Phyllis Phlegar

PEACE FLEECE - AND A BOSNIAN YARN IN CYBERSPACE



Phyllis Phlegar is a graduate of the University of North Carolina at Chapel Hill, and also holds a private pilot's license. She is a freelance announcer and her work can be heard on Business Radio Network, National Public Radio and the Armed Forces Radio Network. Phyllis is currently working on a book to be published by Addison Wesley Publishing Company.

Write to Phyllis, at XHBG67A on Prodigy, P. Phlegar on GEnie, Phlegar on Delphi, P. Phlegar on AOL, 71562,407 on Compuserve or at phyllis@cris.com on the Internet.

In 1984, there was an inmate in Raleigh's Women's Prison who was North Carolina's O.J. Simpson...her name was Velma Barfield, and she was on death row. Everyone had an opinion as to whether this grandmother was a cold-blooded murderer or the victim of her doctors and their possible overuse of prescription painkillers.

Velma confessed to poisoning her mother, her fiancé and two other people. She used rat or ant poison laced with arsenic in their food. Velma's supporters said she went to several psychiatrists over the years complaining of depression, apparently stemming from childhood sexual abuse. On the doctors' advice Velma took drugs they'd prescribed, and got hooked. Over the years the drugs clouded her mind, when what she really needed all along was counseling.

Her victims' understandably angry, grief-stricken families didn't buy that story (neither did a jury of her peers or the governor) and wanted justice to be done. Velma said she never meant to kill anyone, just tried to make them sick long enough for her to steal money (sometimes forging checks) to buy more drugs. By the time her execution date was drawing near, she'd been drug free for years and had received counseling. In fact, the younger female prisoners saw her as a positive force among them. A few months before her scheduled execution date, there was an article in the newspaper about Velma and her knitting...for her grandchildren. I'm not one to make excuses for murderers, but for some reason, I sent a huge box of yarn to her anonymously and any of the other women in prison who wanted it. I did have to tell prison officials who I was.

About a week later, prison officials forwarded a thank you note to me from Velma, who was busy turning the yarn into clothing. The effect of seeing in her handwriting "Thank you, Velma" was more than I could have imagined...she had become for me a real person, sitting in jail, knitting. Telling myself that she did murder four people didn't seem to help.

I hadn't thought about Velma and the yarn I'd sent her for over 10 years, not until I saw a request on GEnie's NeedleArts Rountable for yarn for the Bosnian refugees (themselves in a kind of a prison), from an assistant sysop whose ID was Judy.S.

I had to find out more, so I e-mailed to Judy who told me she'd also posted notes on Delphi and Prodigy. On the Internet she posted to several e-mail lists including the Knitting Listserv, (knit@geom.umn.edu), and the yarn usenet newsgroup, rec.crafts.textiles.yarn. She also posted similar requests for yarn on Fidonet's crafting list, Rimenet's Stitches and someone wrote her and said that they had copied the message onto Circuitnet's Hobbies & Crafts. Judy said that people online "can respond very practically, from the computer screen to closet to a box to Bosnian refugees all within a matter of months," which is critical because these knitting projects will keep people warm. 50,000 items have already been made; the knitting is therapy for these women and also is helping those who need the clothing: children and elderly people.

Judy went on to say "...as I type all of this stuff to you, I realize what an excellent vehicle <GEnie, Delphi, etc.> is for networking in the broadest sense...being online makes the world a very small place, doesn't it?" Then she suggested that I speak with her contact in the Bosnian wool donations, Peter Hagerty, of Peace Fleece, and gave me his number.

Peter and his wife, Martha Tracy, own Peace Fleece (RFD 1 Box 57, Kezar Falls, Maine, 04047, (207)625-4906) which they started in 1985. He'd import yarn from the former Soviet Union (a cold war enemy at the time), and blend it with equal parts of American wool. It

was very well received, and now, Peace Fleece manufactures knitting yarns from this blend in 26 colors. (Trust me, 26 colors is very exciting to us knitters...I want some NOW.)

After the gulf war Peter thought "let's get historic adversaries to cooperate through commerce" and he went to Israel and the West Bank and found shepherds, and people involved in wool, to work together at a certain amount of personal risk to produce a



Women's Commission uses Internet to help healing in Croatia

product that is called Mid-East Peace Fleece.

Peter was contacted by the "Women's Commission for Refugee Women and Children" (also referred to as the Women's Commission or WC) which is based in Manhattan. Since its founding in 1989 under the auspices of the International Rescue Committee (the IRC), the Women's Commission has sought to improve the lives of refugee women and children through a vigorous and comprehensive program of advocacy and public education on the specific needs of the world's refugee women and children. Through the IRC, the Women's Commission has individuals in place with an already established infrastructure; everyone is co-operating world-wide to develop longer-term strategy for helping with the crisis in Bosnia.

Peter went to other mills in New England and asked for donations of large amounts of wool. "We in the yarn business were all competing with each other, but this was an opportunity to cooperate." A competing mill took Peter's wool and spun the yarn, in order to come up with the best product. For a change, he said it was great to all work together; even some trucking companies donated time and trucks.

At this point in our discussion, Peter said I must talk to Babbie Cameron from the WC; Babbie even went to Croatia to be sure the wool made it. I scribbled her phone number on a piece of paper (actually, I typed it on the computer as I'd typed the entire interview with Peter, but that doesn't sound as interesting) and called her.

Babbie had some startling things to say, such as how more than one in every 130 people on Earth are refugees, and that of those 44 million refugees, 80% are women and children. "As in most organizations, the policies for them have been made by men," she said, "the Women's Commission focuses on the forgotten voices of women and children." Babbie was very glad to know that the plight of these forgotten people was now being broadcast to the online community; I told her that those of us in cyberspace who were able - would get the word out.

The WC sent two delegations to the former Yugoslavia in 1992 and 1993. One of the things that came out of the report of those trips was that the women were being held in these large camps with nothing to do. Many of the women were refugees from Bosnia, and equally as many were displaced persons

who were Croatian, and were being held in temporary housing in other parts of Croatia. Their part of Croatia was overrun by Serbs, so they were forced to flee...they are considered "displaced" because they haven't crossed a national boundary in their escape. A refugee who crosses a national boundary qualifies for third country re-settlement but, these Croatians are lost in their own country. One bright spot in their bleak existence is that they also are getting the yarn. Their situation is more tragic because they can't be re-settled, welfare is meager, and their home now belongs to Serbia. Initially the WC wanted to do something for Bosnian women, but Babbie and the others soon discovered there were also Croatian women with the same needs. We've all seen footage about the horrors of the Bosnians, but not the Croatians who somehow got overlooked.

In January of 1994, the WC received a fax from the IRC, which Babbie told me is the largest refugee organization in the world. The fax said they needed one to two tons of yarn, and as many pairs of knitting needles that could possibly be collected, as soon as the WC could get it over there. The Women's Commission had never done anything like this before...never taken a major

figured that anyone with a business like Peace Fleece would have a social conscience and would know how to get one to two tons of yarn together in a short period of time.

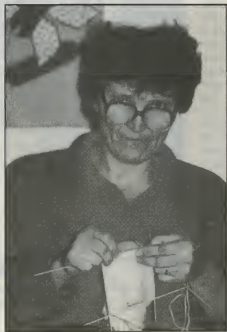
The first phone conversation clicked; Peter was so excited that finally someone was going to help these Bosnians and Croatians, and now, he could really make a difference. Peter got things underway within a week, and thanks to his initiative, the WC was able to ship a ton and a half of absolutely gorgeous wool in May of 1994. That original effort got publicity in trade magazines...and caught the attention of Judy Smith, who, at that point, joined the effort to publicize the "Yarn for Bosnia" project to the online community.

All summer long yarn poured in, some of it from knitters and weavers online. Most people gave their best and tucked letters in for the Bosnian women...stuff like "I had this in my basement, saving it, but you need it more..." Stores that went out of business had saved their most beautiful yarn, and sent it. Through the IRC, the Women's Commission sent another four and half tons of yarn in September, 1994.

Meanwhile, Babbie went to Croatia, along with her assistant, Charlotte Cleveland. They spent 10 days in the camps, seeing that the yarn that had been donated was really being used. Babbie and Charlotte feared all the yarn would just sit in a truck or warehouse. But the long and short of it is that as fast as they'd sent it out, it was getting there, and being used. The two women saw finished garments, and met the Bosnian and Croatian women and spent time in their collective centers. Through translators they took oral histories, listened to hopes, dreams, experiences...and broken dreams.

In the beginning of the trip Babbie and Charlotte were in a collective center in Zagreb, and an elderly woman got up with great dignity and said, "Thank you so much for coming and all the work you are doing for us in the U.S.A. on our behalf. We thought that the world had forgotten us, but your visit helps us realize that we are not forgotten. The yarn is nice but it can't touch our pain." Then she sat down. Babbie felt it was the most affirming thing anyone could say, because it's true.

As she watched the women that day with that pain, and with the addition of the yarn they now have, thanks to this project, over 3,000 women are already getting something they can do together.



Knitting Therapy

collection of any kind. Babbie recalls the WC said, "We'll do it, we'll figure it out, we'll be creative and improvise!"

The first person Babbie called was Peter Hagerty. She knew about Peace Fleece but didn't know Peter. But she



Sorting Skeins of Yarn In Croatia

They are now beginning to be able to earn money with their knitting, and that is, as Babbie put it, "between them and nothing...they have no way to earn money except through their knitting." Part of the way they are making money is thanks to the IRC which has set up a knitting cooperative in Croatia; this enables the Bosnian refugee and Croatian displaced women to be paid for the many sweaters, caps and socks they knit with the yarn collected in the

states. The finished articles will be distributed by the IRC to needy families in Bosnian cities. Part of the spin-off of this knitting project is the knitting cooperative called "Rainbow Socks" that the WC donates wool to, and then finds a new market for their product here in America.

What the Women's Commission needs right now from knitters and weavers in cyberspace is yarn that has some wool

in it, (please no 100% acrylic). Worsted weight or finer yarn (fingering) is great; no bulky weight. They want only full skeins, cones or hanks. No broken skeins or scraps. No knitting or crochet patterns, they can't read them! So many knitting needles have been donated that they are not needed at this time, but do send crochet hooks. If you'd like to send a check (you can get a tax receipt for donations) make it payable to the Womens' Commission for Refugee Women and Children. Mail yarn, crochet hooks and checks to:

The Bosnian Wool Project
c/o The Hartford Presbyterian Church
99 Hartford Street
Natick, MA 01760

How can I compare sending yarn to Bosnian and Croatian women, to sending yarn to convicted killer Velma Barfield? Maybe the yarn, and what Velma could do with it was between her, and her date of execution. When the governor of North Carolina rejected her plea of clemency, Velma was executed on November 2nd, 1984, four days after her 52nd birthday, wearing pink pajamas. The knitting had stopped. But it continues, with hope...today, in Croatia. ♦

ModemBase Pro

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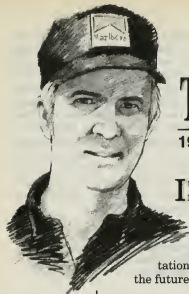
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Jim Thompson is Managing Editor of Western News Service in Los Angeles, California. He also manages the Marlboro Racing News BBS. CompuServe: 72777,2677, MCI Mail: 321-4127, INTERNET: jim.thompson@wnsnews.com

TECHNOLOGY FRONT by Jim Thompson Western News Service

1994 — A YEAR OF HIGH EXPECTATIONS AND BROKEN PROMISES

It was only a year ago, in this very magazine that I wrote, "Judging by the plans from the leading players in this arena, 1994 will be the year when photo transfer and high quality graphics break loose from their limitations and truly begin to define and sculpt the future of the online world."

Pass the salt! Dinner is served and I am now eating those words!

With only a few exceptions, none of the promises for this technology emerged in 1994. It could have been a breakthrough year for online graphics and photo viewing. Instead, 1994 was a year when most of the commercial packages in this arena began strangling their own industry. A string of broken promises about release dates was the first stage of the strangulation process. This was followed by the apparent naive assumption that the world would wait for these products. In some cases, we are still waiting for products that were promised a year ago.

Wake up and smell the coffee, guys. The world was not willing to wait. While many of the software companies were wasting everyone's time trying to get their DOS based systems to address a world hungry for high-end graphics, sound, video and a true graphical interface, the World Wide Web was burning up the electronic highway.

I looked at the same software companies I polled one year ago to see which ones held to their promises for the release dates of new products or for upgrades to existing products. Along with this, I asked them to again give me a list of their plans for the coming year. Here is what I found.

TELEGRAFIX COMMUNICATIONS, INC.

Despite the hype and anticipation, the long awaited version 2.0 of RIP is still not available. At least it was not available at the time of the writing of this article. At the end of 1993, Jim Bergman of Telegraphics Communications, Inc., said it would be released "in the first quarter of 1994." As of November, 1994 it was in beta and Bergman said it should be shipping before the end of the year.

Version 2.0 of RipTerm provides some major enhancements. Among the new features are support for screen resolutions up to 1024x768 (256 colors), support for 19 audio boards, the ability to view JPEG and GIF files as they are downloaded and the addition of CompuServe Quick B+ protocol.

Although not available at the time of this writing, RIPscript version 2.0 reportedly includes integrated JPEG and GIF image file formats for compressed photos, BMP support for icons and simple graphics, digitized audio playback while graphics are being displayed, 24-bit color support, multiple color palettes, text windows, new poly-bezier drawing commands for "flexible" curved/filled objects and enhanced raster operator support.

I was able to preview a beta version of RipTerm in mid-November. Although there were some minor bugs, it did seem to be stable. At that time, there was no firm date for the release of RIPscript version 2.0.

I certainly understand the complexities involved in program development. However, I don't see any excuse for a delay of nearly a full year from the time a product is announced to the time it is actually available.

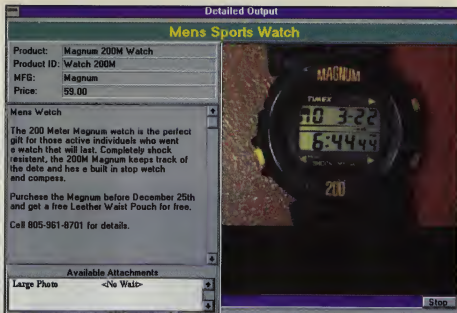
When a final version is released, it may just be a case of being too little, too late. Because of the long delays, many program developers who were planning on incorporating RIP 2.0 into their products and many end-users have moved to other products. Also, there seems to be no effort to write a Windows version of RipTerm. Sure, the DOS version will run under Windows, but for many that is just not the same. As far as I know, there is also no plans for a Macintosh version. If RIP is ever to become a standard, it will have to work under all major operating systems.

At one point it appeared that RIP was actually going to emerge as the standard for online graphics. Unfortunately, Telegraphics failed to keep pace with the rest of the industry and, frankly, made a lot of people mad with all the delays. Unless they do some excellent marketing, RIP could come to mean "Rest in Peace" — killed by self-inflicted wounds.

DURAND COMMUNICATIONS NETWORK

Durand Communications Network just barely managed to sneak in their online relational multimedia database called Genesys before the end of the year. This is a program that, according to Andre Durand, President of Durand Communications Network, was to be available "by late February" of 1994 and sell at a price "around \$595."

It was not until October that the product finally made its appearance — a full seven months after the announced date. When it did finally surface, the price was almost double what was originally announced.



Durand Communications' Catalogs Plus application operating through DC Genesys

Still, it did make it in 1994 and, although I have only taken a preliminary look, it appears to be a solid product with some nice features. Its one drawback may be that it runs under a doorway instead of being integrated into the BBS itself. This means it requires a fair amount of hardware to operate including a separate machine attached by a multi-port board (like a Digiboard). (NOTE: A full review is planned for a later date.)

DC Genesys is a database that will work with most any BBS that allows for a doorway. Compatible with dBase III+, dBase IV and FoxPro2, it allows text files, images and sound files to be attached to database records. Genesys includes the GeneScript Application Language which makes it possible to link an application's graphics menus to a database. According to Durand Communications Network, "Using GeneScript, you can create a whole series of ANSI or RIP menus that make up your application." The package also includes a new protocol called WIP (Windows Interface Protocol), making it possible to create "a truly Windows GUI interface."

Included is an updated version of DC Term and a new Windows version of the terminal program. The Windows program was still in beta testing when this article was written, but Durand says it will be available "by December, 1994."

Durand says they will soon be releasing a version of Genesys called DC Genesys II for Galacticom which will "enable

DC Genesys to run directly on top" of The Major BBS. No release date is set for this product.

Durand also promised that in 1994 they would have an add-on to TBBS that would allow TDBS applications to use DC Term and link photographs to a database. It was supposed to be released sometime in January, 1994. It never made an appearance. In fact, I have not heard anything more about it. Don't hold your breath on this one ever being released.

Another Durand Communications Network program that was talked about at the end of 1993, but is not yet ready is one called CLASS (Client Access to Systems and Services). This was touted as an online service that, according to Andre Durand, would "set a new standard for online information services."

CLASS will reportedly be composed of two key elements. CLASS Access will allow "clients to establish a network connection to a Windows NT host via modem, X.25, ISDN or TCP/IP." According to Durand it will also "allow for the automatic updating of remote client software, background image transfers and ODBC connectivity to SQL databases."

CLASS Online is described as a "relational database-driven online server for the Windows NT platform."

Andre Durand says much of 1994 was spent on development for CLASS. He says a release date is set for "around January 15, 1995."

IMAGEN, INC.

To their credit, Imagen, Inc. did release version 1.5 of Fracterm. It also contained most, but not all, of what was promised. Their download engine was improved and support was added for the decompressing and converting of 11 formats in addition to their hallmark Fractal format (FIF).

But all was not rosy. First, the release of 1.5 took several interim versions to get right. For a while, there was a new beta version almost every week. When one problem was fixed, another would surface. It got to a point where I didn't even want to hear about another version. It was taking hours to sort out the new problems that were surfacing. Finally, several months after the promised date, a relatively stable version was released.

The program still seems to have some occasional lock-up problems with certain CPU/graphics card combinations, but it is generally a reliable platform.

Imagen, Inc. was also able to work out the bugs of transferring and displaying fractal images over the Internet. Again, it took a lot longer than Dwight Jones, president of Imagen, Inc., predicted, but they did make it work.

Another feature that Imagen, Inc. was hoping to add to Fracterm, and did not, was RIP support. However, I can't hold



Instant Exposure - Modeling Industries Online System, using Durand's CLASS Technology

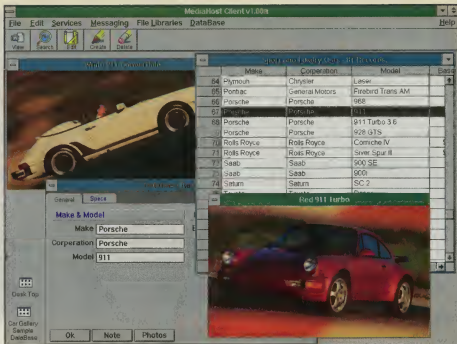
them to task for not adding this in 1994. They did say it would be RIP 2.0 that would be incorporated. RIP 2.0 is still not out and there is no time table for shipping.

Imagen, Inc. has now decided that they will not support RIP. "We see terminal mode itself as dated, and probably extinct within the year as callers look for the AOL, Compuserve, Mosaic or Interchange look in a graphics mode. The RIP environment requires reconfiguring for every board called, which surfers dislike, and the environment itself is too complex for public information systems. The high ground now is hypertext, HTML and the WEB model. There is a danger with RIP that we'd be all dressed up with no place to go," Dwight Jones said.

One thing that has still not emerged is their "Real Times" project. Although announced in 1993, V2.0 of Fracterm/Real Times is still not available as we enter 1995. Citing the requirement for a single composition editor, such as found in Windows 95 (WordPad), Dwight Jones says they will not release the product until Windows 95 is available.

"The past year has seen a transition to object oriented technology, and Imagen has taken the year to convert to OLE 2.0 functionality. Our customers expect an upgrade path toward the WEB and Mosaic, and they won't be disappointed. We expect our RTC file format to become the unit of discourse on the WEB," notes Jones.

Real Times will allow for fully formatted pages, similar to World Wide Web pages, to be transmitted to a caller. Instead of being a single element file, the new RTC format will be a hybrid of



MediaHouse Software Inc.'s Windows-based graphical BBS

text and photos (either GIF or JPEG format). This means the text is searchable and hypertext text links are possible. Best of all, this technology, like their current Fracterm program, will work with virtually any BBS package.

While V2.0 of Fracterm/Real Times waits in the wings, Imagen, Inc. is offering custom image-based databases. With prices starting at \$975, the custom program will reportedly work with "just about any online database" including TDBS, The Major BBS, ModemBase Pro, Visualbase, Alex, etc.

Jones is also aware that the time for DOS based systems is about at an end. In his words, "The future is in 32-bit operating systems."

I agree that if a BBS wants to be around in the future, it will have to run under a 32-bit, multi-tasking system. Currently, Imagen, Inc. is working on a number of new products that Jones says will address the "need for imaging in high-end commercial applications."

Let's just hope that another year

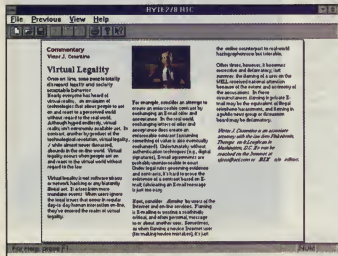
doesn't pass before the products are available.

MEDIAHOUSE SOFTWARE, INC.

This is the only company included in my article from last year, that not only fulfilled its promises, but actually went beyond its pledge. Under the vision of Seth Hamilton, MediaHouse Software, Inc. (formerly Hamilton Telegraphics, Inc.) has created what may be the model for future online systems.

RoboBoard FX was released on time and had all the features promised, but Seth didn't stop there. He expanded on his Tel-FX protocol to create MediaHost, a graphical (Windows-like) online system. Seth seems to be the only one paying attention to the detours and repaving that is taking place in the electronic highway.

I have not had an opportunity to look closely at MediaHost for Windows, but what I have seen is impressive. It includes support for viewing graphics and photo images. Best of all, it allows for the concurrent uploading and downloading of files while still maintaining the full use of such system features as chat and messaging. There is also built-in support for CD-ROM imports. This allows a user to request a file or group of files that may be on a CD. The file or files are then downloaded in the background while the caller uses other features on the BBS.



Imagen's RTC Technology gears up for tomorrow

This is truly the wave of the future for the online world. Seth Hamilton and MediaHouse Software, Inc. continue to be the ones to watch.

DARKSTAR PUBLISHING

Since last year, several other Bulletin Board Systems have moved into the graphics/photo arena. One of the new entrants is DarkStar from Paragon Labs.

While the list of features is impressive, DarkStar v1.02A was not available at the time of this writing. The company says it will be the first "DOS-based telecommunications platform to offer photo-realistic images, online digital audio, and online movies." It is supposed to be available by December, 1994.

DarkStar will reportedly support 256-color movies in .FLI format, with fade, cut loop and speed control, audio in .MOD, .SAM, .WAV, .VOC, .MID, .CMF, and .ROL formats and 256 color photos in .PCX, .BMP, and .GIF formats. The feature list also includes support for standard DORINFOX.DEF ANSI doors and InterWare which is their own "arcade-quality multimedia doorware platform."

Additionally, they promise transparent CD-Rom access, dBase and FoxPro compatible online databasing with photo and audio support, and an interesting mouse system that supposedly allows you to "view your user's mouse movements and take control of those movements."

The package will be Novell compatible and include graphic, Ansi and Icon editors.

It sounds great. Let's just hope they can deliver as promised.

GALACTICOMM

Many of the major players in the BBS game are also offering support for graphics and photos as well. Among them is The Major BBS from Galacticomm which includes integrated RIP support. The Major BBS does not offer the ability to display photos in the base package. However, a spokesman says an add-on package called "Search and Retrieve" does allow for photo files to be attached to text documents. DC-Term from Durand Communications Network works exclusively with this package and allows for photos to be attached to database records.

Galacticomm is working on a number of new things for 1995. Most intriguing is something they have code named "Project Victory." According to a spokesperson, "Project Victory will provide the final piece in arming the local BBS operator to match the America Onlines of the world...expect a Major unveiling in the first half of '95." Galacticomm has always been quite good about holding to announced release dates. They may slip by a few weeks due to last minute problems, but their track record has been good.

eSOFT, INC.

TBBS from eSoft, Inc. is another major player in the BBS arena that is moving more toward a graphical interface with photo capabilities. Phil Becker, president of eSoft, Inc., has always had a simple philosophy — provide the tools needed for the user to design his or her own custom system. While TBBS does not specifically provide integrated support for photo display or graphics, both features are possible (and relatively easy to accomplish) via TBBS programming or third-party software.

TBBS works nicely with RIP, Fracterm and Genesys. Full graphics and photo display are possible with these packages. Also, the new IPAD from eSoft will allow BBS operators to provide photos, graphics, video and audio via a World Wide Web server.

One other major factor is that Phil Becker understands the value of listening to his customers. I have no doubt that if a new standard for online graphics or photo display emerges, he will make it work with TBBS. Best of all, when Phil makes a promise, he sticks to it. In my experience, if he says he will have something at a certain time, he has it. If he says it will work, you can bet it will.

CONCLUSIONS

What appeared to be a bright future for online graphics just one year ago, is now more muddled than ever. Promises that go unfulfilled are not helping the matter. I think it is time for software developers to start treating their customers with a little more respect. If they don't, those customers will just go somewhere else.

A year ago, DOS based systems held a tight grip on the market. Today, that grip is slipping rapidly. One has to ask the simple question, "is DOS a powerful enough system to address the needs of

the future?" With the need for online video, audio and high resolution photos, the answer is probably no. The requirements for high end services means 32-bit operating systems or at least those that go beyond the limits of DOS.

The upshot is that we will all have to learn new ways of doing things and new software will have to be developed. I know none of us want to face this possibility since it means starting all over and building new systems. But that is the reality we must all face.

As someone once observed, "one can fix all the problems in a stage coach and the result may be the perfect stage coach, but the work is unlikely to produce an automobile." ♦

CONTACTS

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DURAND COMMUNICATIONS

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BBS: (805) 961-8702

IMAGEN, INC.

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Ganges, B.C. Canada V8K 1N2
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BBS: (713) 894-5993

GALACTICOMM, INC.

4101 SW 47th Avenue
Suite 101
Fort Lauderdale, Florida 33314
Tel: (305) 583-5990
BBS: (305) 583-7808

eSOFT, INC.

15200 E. Girard Avenue
Suite 3000
Aurora, Colorado 80014
Tel: (303) 699-6565
(Call for access to demo system)



BOARDWATCH

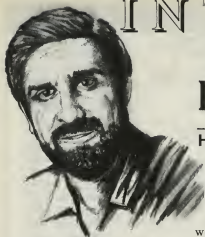
List of BBS List Keepers



This listing comprises a list of those who compile and maintain lists of bulletin boards, either by topical category, or by some geographic area or definition - often by area code. The primary bulletin board system where the list can be downloaded electronically is also included.

BBSLIST TOPIC	AUTHOR/EDITOR	CONTACT BBS	TELEPHONE
New Jersey BBS's	Scott Drake	T.E.R.N. BBS	(201)399-4772
Connecticut AC 203	Kevin Brook	Creative Edge BBS	(203)743-4044
BBS With Handicapped Focus	Bill McGarry	Handicap News BBS	(203)926-6168
Known Networks	Victor Laking	Generic BBS	(204)475-5199
Manitoba, Canada List AC 204	Victor Laking	Generic BBS	(204)475-5199
Seattle AC 206/West Washington	Bob Dinse/Nanook	Eskimo North	(206)367-3837
Tacoma Washington AC 206	Richard Langsford	ArmoCat BBS	(206)566-1155
Puget Sound Area	Art Tomlin	Orion Station	(206)675-0565
Kitsap County Washington	Michael Schuyler	Quicksilver BBS	(206)780-2011
Maine 207	Scott R. Bodeen	Street Corner BBS	(207)442-0997
Modesto, CA BBS List	Chris Mitchell, "Gomba"	Anything Goes	(209)491-0782
Central California AC 209	Jack Porter/Madera UG	Zen Den Systems	(209)675-8436
San Antonio TX (AC 210) BBS	Donna Murrell	Main Complex BBS	(210)658-8009
Graphical User Interface BBS	David Shapiro	The Goosy (GUI) BBS	(212)876-5885
96 List - 9600+bps BBS	Ken Sukimoto	Downtown BBS	(213)484-0260
Employment BBS's	George Smith	Executive Connection	(214)306-3393
Dallas/Ft.Worth BBS List	Mark Elson/Mike Shockley	Blues Cafe	(214)638-1181
Open Access UNIX Site List	Phil Eschallier	LGNET (login:BBS)	(215)348-9727
Cleveland Area 216	Jim Barry	Flip Flop	(216)951-9134
Educational BBSs	Joe McIntosh	KSI Public BBS	(219)626-2150
Educational and Indiana BBS	Joe McIntosh	KSI Public BBS	(219)626-2150
Conservation/Nature BBS List	D. Wendling/JS Christianso	Coin of the Realm	(301)585-6697
Ham/Amateur Radio BBS	Stan Staten	3WINKs BBS	(301)590-9629
Handicapped Issues BBS	Richard Barth	HEX BBS	(301)593-7357
Desktop Publishing BBS	Frank Atlee	Infinite Perspective	(301)924-0398
Delaware AC 302	Vince Boehm/Dave Osburn	Talk Radio BBS	(302)429-7667
Colorado AC 303/719	Willis Morrow	Big Boy's BBS	(303)458-3832
Cave Exploration BBSs	Douglas L. Moore II	The CatEye BBS	(304)592-3390
South Florida Area 305/407	Eric Thav	Silicon Beach BBS	(305)474-6512
Southern California	Mike Heffernan	SOCAL Corner	(310)422-7942
California AC 310	Jim Walton	Illusions BBS	(310)804-3324
Detroit Area 313	Horst Mann	Tony's Corner	(313)754-1131
St. Louis AC 314	Beth Brooks	Fire Escape's Dir	(314)741-9505
ASP BBS Member List	Richard Holler	The RoadHouse BBS	(317)784-2147
Engineering Related BBS	Arthur Patzelka	Computer Plumber	(319)337-6723
Rhode Island Area 401	Mike Labbe	Eagle's Nest	(401)732-5292
Alberta AC 403	Stephen Decarie	T-8000	(403)246-4487
Calgary Alberta AC 403	Jeremy Birkett	The Quantum BBS	(403)252-5119
Atlanta Area 404	Online Atlanta Society	OASIS	(404)627-2662
Atlanta Area 404	Rodney Aloia	The INDEX System	(404)924-8472
Montana Area	Jay Michalik	Valley Light BBS	(406)273-6399
Searchlight BBS Systems	Chad Payne	Montana MediaNet	(406)549-6325
Orlando BBS List AC 407	Lenny Lacuy	Infinite Space Onlin	(407)856-0021
San Francisco Bay Area	Mark Shapiro	BABBA BBS	(408)946-8592
Baltimore BBS Area 410	Brad Blase	Silver Streak BBS	(410)683-0300
Pittsburgh AC 412	Chas Stokes	Zuul's Catacombs	(412)264-9787
National BBS List	DP McIntire/Beth Spotts	Ameriboard	(412)349-6862
Milwaukee Area 414	Mark G.	The Castle	(414)327-5085
North America Nudist List	Patrick O'Brien	Natural Connection	(414)426-2110
Toledo Ohio Area 419/313	Ryck Zarick	Toledo's TBBS	(419)475-2241
Arkansas Area 501	Bob Underdown	The Blue & The Grey	(501)444-8420
Louisville KY and South IN	Tim Arnold	Dance of Shiva BBS	(502)893-6360
Portland Oregon BBS	Lisa Gronke	DawGone Disgusted	(503)297-9145
New Orleans AC 504	Darin Celino	Southern Belle BBS	(504)455-9488

BBSLIST TOPIC	AUTHOR/EDITOR	CONTACT BBS	TELEPHONE
New Mexico Area Code (505).....	Dan Kiehl	MDC Computers BBS	(505)434-0258
Apogee/ID/Software Crtns List	Dan Linton	Software Creations	(508)368-7139
PCBoards on Internet	Ruben Melo	ponyXpress BBS	(508)587-7669
Worcester MA AC (508)	Jim Metzler	Miwok Village BBS	(508)754-6512
Corpus Christi	James Cordani	Treasure Island	(512)241-8358
Austin Area BBS List AC 512	John Foster	Camel's Back BBS	(512)243-0077
Selected BBS	Joseph Caplinger & Son	JB's BBS	(513)236-1229
AC 516 Free Shareware BBS	Harold Stein	Long Island Exchange	(516)271-5303
516 AC, 800 numbers, Freenets	Wilton Virgo	Long Island BBS	(516)338-8595
Area Code 517 - Mid-Michigan	Rick Rosinski/SAMM	Wolverine BBS	(517)695-9952
Phoenix AC (602)	John Mendivil	Majestic Royalty BBS	(602)278-1651
Phoenix AC (602)	Sue Widemark	Cheese Whiz BBS	(602)279-0793
Cochise County Arizona	Kevin McCrory	The Commo Shack BBS	(602)452-0587
Arizona and Southwest U.S.	Michael	BBSouthWest	(602)820-7861
New Hampshire BBS's	Mike Maggi	Marios Birdhouse	(603)226-0467
Victoria/Vancouver AC 604	Mark Morley	Island Net	(604)477-5163
Kentucky AC (606)	Jon Hagee	Kentucky Explorer	(606)271-1451
Wisconsin 608	Jim Wargula	JW-PC Dataflex.HST	(608)837-1923
New Jersey AC 609	Dave Schubert	The Casino BBS	(609)485-2380
New Jersey Area 201/609/908	Wayne R. Morton	Praedo BBS	(609)953-0769
Medical Issues BBS	Edward Del Grosso	Black Bag	(610)454-7396
Job Search and Inet hot list	Ward Christman	Online Opportunities	(610)873-7170
Minnesota Twin Cities AC 612	Barry Watson	Abiogenetic BBS	(612)774-8454
Apple II BBS	Mike Sheckett	Way Out	(614)436-4846
Tennessee AC 615/901	unknown	SPDA Info Service	(615)952-5638
Business/Professional BBS	Dennis Hauser	Delight The Customer	(616)662-0393
Female Sysops	Brenda Donovan	The Pacific Rim	(619)278-7361
San Diego, CA AC 619	Tom Grigg	ComputerEdge	(619)573-1675
San Diego AC 619	Joe Nicholson	General Alarm	(619)669-0385
Apple II BBS with Internet con	Morgan Davis	pro-sol	(619)670-5379
Virginia AC 703/804	Eddie Gebhard	PC Power House	(703)348-1423
OS/2 BBS Systems	Pete Norloff	OS2/Shareware BBS	(703)385-4325
Genealogy Related BBS	Richard A. Pence	NGS-CIG	(703)528-2612
Charlotte, NC AC 704	Blaine Schmidt	Moobasi Optics, Ink	(704)541-9842
Indigenous People BBBS	Arthur McGee	BDPA BAC BBS	(707)552-3314
Black Run/Oriented BBS	Arthur "Rambo" McGee	BDPA BAC BBS	(707)552-3314
Chicago	Peter Anvin	Royal Swedish Viking	(708)491-9036
Gay & Lesbian BBS List	Billy Kennedy	Risqily BBS	(708)495-6609
Airline Pilot/JUMPSEAT BBSS	Rex Chadwell	ChicAgo Hangar	(708)980-1613
Houston Area 713	David E. Wachsenschwanz	Atomic Cafe BBS	(713)530-8875
Korean BBBS	Wayne Jeong	Korea America Online	(714)449-9373
Area Code 715 BBS's	Corey Koltz	YES It's another BBS	(715)345-7132
Rochester NY AC 716	Tracy Logan	Logan's Run	(716)328-2914
RIP BBS Listing	Mario Mueller	Antarctica BBS	(717)755-2440
717 AC BBS Listing	Adam Viener	Cyberia	(717)840-1444
Vermont BBS's	Russ Boyce	Computer Ser. of Ver	(802)334-7976
Ecology/Conservation BBS	Bob Chapman	EarthArt BBS	(803)552-4389
Central California Area 805	Larry Honore	His Board	(805)652-1478
Wildcat BBS	Jim Harter	Wildcat! HQ	(805)873-2400
Oahu Hawaii	Brent Davis	Land's End BBS	(808)499-2527
Technical Support BBS List	Gary Barr	Digicom BBS	(812)479-1310
Pinellas/Tampa Florida AC 813	Emery Mandel	Mercury Opus	(813)321-0734
Kansas City Area 816/913	Bob Zumbunnen	PC-HELP BBS	(816)331-4703
Dalls Fort Worth BBS List	Mark Robbins	Second Sanctum	(817)467-1175
Occult BBS	Phil Hansford	Mysteria	(818)353-8891
Commodore 64/128/Amiga BBS	John Rigali	Night Gallery	(818)448-8529
Texarkana BBS List	Rodney Payne	Internet Connection	(903)793-7173
Internet accessible BBS's	Richard S. Mark	Dragon Keep	(904)374-3500
Durham Region-Ontario Canada	Shawn Berry	Seventh Dimension	(905)571-6052
Alaska AC 907	Patti Johnson	Alaska Pirate Soc.	(907)248-9364
Travel Related BBSS	Robert Southwick	AK Information Cache	(907)373-3205
Kansas 913 Area Code BBS's	Chuck Blacklock	On-Line Connection	(916)587-0241
Darwin National USBBS List	Bob Breedlove	Bob's BBS	(916)929-7511
OS/2 Related BBS	Dave Fisher	LiveNet 1:170/110	(918)481-5715
Tulsa Oklahoma Area BBS List	Linda Hargraves	ACCESS AMERICA	(918)747-2542
Raleigh NC Area Code 919	Mike Stroud	Micro Message Svc.	(919)779-6674
National ISDN BBS list	Ken Morrison	Digital Velocity BBS	(919)992-3059
Republic of South Africa	Henk Wolsink	Catalyst BBS	27-41-34-1122
Switzerland BBS List	Cesar Keller	The Warehouse BBS	41-1-492-5157



INTERNETICA

net.imperative by Harley Hahn and Wendy Murdock

HUMOR ON THE NET

Sure, discussing politics on Usenet is great, and downloading free software and pictures of naked women is certainly a worthwhile activity, but when you search for the real reason why we need an Internet, it comes down to the funny stuff.

Yessir: the funny stuff. Where is all the funny stuff on the Net?

The answer is, lots of places. In fact, there isn't one Net resource that hasn't been adapted for passing around jokes and humor. So take a few minutes away from trying to solve the world's problems and join us on a guided tour of the Internet's humor resources.

HOW HUMOR STARTED ON THE NET

Nobody knows where and when the first joke was sent out over the Internet. However, the granddaddy of Net humor is the Usenet group **rec.humor**. One of the oldest and most beloved newsgroups, **rec.humor** had, for years, been a staple of the Internet's intelligentsia.

For example, the other day, I happened to be in my bank, scaring my bank manager into fits by showing her my latest royalty check. As befits such an occasion, she asked me if I had heard the latest joke that was making the rounds and, demonstrating the politeness that comes naturally to any writer, I said "No." But of course, I did know the joke. I had read it several days earlier on **rec.humor**.

Consider the following thought experiment. Post an original, funny joke to **rec.humor**. Now, buy a ticket on the fastest airplane you can imagine for any destination in the developed world. We maintain that there is nowhere that you can travel to in person, by the fastest plane, that your joke won't already be there when you arrive. The Net is more important than most people realize in contributing to current world culture and **rec.humor** is probably the single most influential newsgroup.

TAKING CONTROL, USENET STYLE

If the **rec.humor** newsgroup is the aristocrat of Usenet, its one-time controversial offspring **rec.humor.funny** is probably just as well-known. In its original incarnation, **rec.humor.funny** was started as a moderated group in an attempt to solve the age old problem of everyone wanting to get into the act. The first moderator was Brad Templeton, then of Waterloo, Canada, who combined a flair for selecting jokes with

the diplomatic subtlety of the Syrian foreign minister.

Templeton's control of the moderated group was controversial because of his similarity to an old-time martinet who preferred to rule by ukase rather than by consensus. And just about the time that people started getting used to the idea and inevitability of Brad-the-humor-king, he ran smack into even more controversy by collecting the jokes (sent in by the Net at large) into printed books which he then sold for money. The arguments and raging discussion regarding what was owned by the people and what was available to be collected and re-sold were crucial in establishing the prevailing mores of the Net, the gist of which are intact today.

Similarly, a long and oft-times acrimonious debate about whether or not **rec.humor.funny** should contain obscene or otherwise offensive material was important to the development of how the Net came to think about such issues. If you are a newcomer to the Net (say, within the last few years), you can thank the people who frequented **rec.humor** and **rec.humor.funny** in the olden days, for blazing the trail of free speech and the right to be silly and obnoxious in public that all of us so enjoy and take for granted today.

Templeton went on to found Clarinet (the company that sells real news in Usenet format) and today's version of **rec.humor.funny** is moderated by Maddy Hausmann Sojourner. Templeton's company still retains control over the newsgroup and Templeton himself is the "executive moderator." Still, the important point is that **rec.humor.funny** is the principal moderated Usenet joke group and, as such, definitely belongs in your list of top 5 newsgroups to check regularly. Perhaps the best way to put it is that **rec.humor.funny** is the place to look for a few selected jokes, about 40% of which are funny.

The **rec.humor** group, being unmoderated, has hundreds more jokes. Of course, you will encounter a lot of junk, but **rec.humor** has an important function: it is now the world's premier clearinghouse for new trends in humor. For example, long before the fat lady started to sing about the murders of Nicole Simpson and Ronald Goldman, readers of **rec.humor** had already compiled and posted the canonical list of O.J. Simpson jokes.

BAD TASTE AND WHERE TO FIND IT

Perhaps the most enduring controversial issue that arises within humor groups is that of offensive jokes. It was decided a long, long time ago (before we were even on the Net) that, bad taste being in the mouth

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Wendy Murdock is an artist, writer, and Internet veteran specializing in creative art forms including BBSs and MUDs.

of the beholder, the only reasonable way to deal with things that offend is to make sure that no one had to read them by accident. Recognizing the alternative — censorship — as a consummation devoutly not to be wished, the minions of the old-Net decided on two methods of avoiding accidental insult.

First, they adopted a scheme called "Rot-13" in which potentially controversial articles could be encoded. The name comes from the fact that, within the article, each letter replaced by the letter that is 13 positions away in the alphabet. For example, the word "The" would be encoded as "Gur". Here is a sentence with an important message that has been encoded using Rot-13:

Gur Vagrearq Lrybjb Cntrf naq Gur Vagrearq Pbcyrqr Ersrerapr ner gur orfg Vagrearq obbxf rire jevggrra.

The idea is that when you post a potentially offensive article to a newsgroup, you have the option of encoding the article with Rot-13 before posting it. If a person wants to read the article, he or she can encode it (the facility is built-in to all newsreader programs). However, the person will have to deliberately tell their newsreader program to decode the article, so no one can complain that they had to read an offensive article by accident. So if you see an article (say in **rec.humor**) that has a subject of "Joke about Green people: Rot13," and you happen to be offended by jokes about Green people, you won't have to read the joke unless you choose to decode it so, no matter how much you believe that jokes about Green people are in bad taste, you can't complain. (Or rather, if you do complain, no one will listen.)

We mentioned that there are two ways in which offensive material is posted to the Net. Rot-13 does work, but it is not really used that much any more. Generally speaking, people have grown up a lot since the early days of the Net and have come to expect that there will be articles that offend and that the mature thing to do is ignore them. However, when there is a clear need for a forum for such material, the real solution is to start a new newsgroup, specifically for posting such material. In the case of humor, the first such newsgroup was **alt.tasteless.jokes**.

This newsgroup was started with two purposes in mind: to provide a place where people could send and receive tasteless jokes, and to eliminate, once and for all, the gripes of small-minded

people who kept raising the censorship/bad-taste issue in **rec.humor**. This being a family magazine, we can't show you examples of typical **alt.tasteless.jokes** articles, so you will have to explore for yourself. Just remember, no matter what you find, you are not allowed to be offended.

KEEPING THE HUMOR GROUPS PURE

Aside from breaking important Net ground with regards to offensive material and how to handle it, **rec.humor** was also the scene of another important invention: the solution of what to do about people who fill the group with discussion when they should be sending in jokes. The main purpose of **rec.humor** is to read jokes, not to discuss jokes (or related issues such as censorship). Towards this end, a tradition evolved that, if you were going to post an article that discussed something — such as why you happen to feel it is in bad taste to make jokes about Native American black Jewish disabled people of Polish ancestry who have AIDS — you must, at the very least, always include a short joke. This joke became known as the "obligatory joke" or the "ob joke." So, according to the customs of **rec.humor**, it is considered impolite to post anything but a joke. However, if you do post a serious comment, it is considered a little less rude if you include an obligatory joke.

Unfortunately, there are too many people who feel that "The guidelines are great, they just don't apply to me." Moreover, there are legitimate reasons why someone would want to discuss a joke or raise a humor-related issue. Thus, another group, named **rec.humor.d** was formed. The "d" in the name stands for "discussion." The intention is that **rec.humor** should remain pure, containing only jokes, while discussion about jokes (especially those posted to **rec.humor**) should be directed to **rec.humor.d**. This is also the place to send requests such as, "Does anyone know where I can find the list of all the sorority girl light bulb jokes?"

In practice, this system works imperfectly, as there are too many ignorant Net users and far too much discussion in **rec.humor**. Still, what can you do? The only reasonable alternative we can come up with is to close off the Internet to America Online users until they have passed an entrance test. But that would break federal laws that prohibit discrimination against the intellectually challenged.

However, the idea of having a special group, just for discussion of a popular topic, has become an important one. Seeing the characters ".d" at the end of a newsgroup name is a tip-off. For example, the group **alt.sex.stories** is for erotic stories. The groups **alt.sex.stories.d** is for discussion (or requests) relating to such stories.

FINDING YOUR NICHE

If you are the type of person who develops a strange taste for specific types of humor, there are a few Usenet groups that may meet your needs. The group **alt.humor.puns** is specifically for humorous word play. Not only for puns but, all sorts of short non sequiturs, such as Tom Swifties. (For example, "The steering wheel won't turn," said Tom aimlessly. Or, "I can't seem to turn off the light," said Tom brightly.)

For those whose cerebrums have not advanced far enough along the intellectual spectrum to appreciate puns, there is always **alt.cascade**. A cascade is a long series of meaningless quips and followups, created by the efforts of numerous people and accumulated into one long article. Of course, this definition doesn't begin to describe the content-deficient brain-dead characteristics of a real cascade so, if you are curious, perhaps you had best check it out for yourself.

For those of us with more devious machinations, the group **alt.shenanigans** is the place to look for all sorts of ideas and stories relating to practical jokes and pranks. Within this group, such occurrences are called "shens". For some reason, there are always a plethora of shens that you can apply to roommates. For example:

The SHOWER REVENGE:

Get a chicken bullion cube and put it in the shower head. Your roomie will wonder why he smells like chicken and all of the neighborhood animals are licking him.

The CAR REVENGE:

An exhaust whistle (from your local novelty store) in the tailpipe will be the best \$2 you have ever spent.

Clearly, this sort of information is invaluable under certain circumstances and even a casual perusal of **alt.shenanigans** is likely to provide you with ideas for weeks to come.

RESOURCES

Another special interest humor group is [alt.atheism.satire](#). Herein, you will find articles that recognize there is no God and poke fun at people who believe and their ideas. For example, a recent posting was a "press release" from Microsoft, detailing their plans to acquire the Catholic Church and integrate it into the Microsoft universe.

WHY ALL OF THIS IS SO IMPORTANT

So humor and jokes are nice, but are they important to the Net? The answer is a vociferous yes, yes, yes.

You see, the Net is one of the most important inventions ever in the history of the world — we have a wonderful proof of this but, unfortunately, there isn't room for it here — and humor is the grease that lubricates the wheels of change.

For instance, some of the most important issues and technologies were developed within the Usenet humor groups. It is no exaggeration to say that if there is one idea that pervades the Net ethos it is that censorship is a Bad Thing and that people are expected to avoid things that offend them. Moreover, if we take reasonable precautions to ensure that no one has to see anything offensive by accident, people who choose to view such material have no right to complain.

This is nothing less than a whole new way of dealing with the balance between freedom of expression and freedom from harm in an environment in which no one is in charge. The most wonderful thing about the Net is its very existence: there has never yet been such a large gathering of people over which no one had clear authority. And although many people think that the Usenet humor groups are nothing more than places to swap jokes, they are, in reality, the leading edge of the wave of modern evolution. So rest assured that when you spend your time to read jokes on the Net, you are not just idling away a few idle minutes. Rather, you are watching human progress in action and participating in what is truly a revolution in the history of mankind.

Now, if we could only remember how many blonds it takes to screw in a lightbulb... ♦

HUMOR ON USENET

Much of what qualifies as humor on the Net happens within Usenet: the worldwide system of discussion groups. For historical reasons, we often refer to these groups as "newsgroups," although they do not contain real news.

The most important Usenet humor newsgroup is:

[rec.humor](#)

Anyone can post anything they want to this group, although the convention is that you should post only jokes. If you want to discuss a joke, or send in a request for something, the proper group to send it to is:

[rec.humor.d](#)

For tasteless jokes, the place to look is:

[alt.tasteless](#)

Be aware, though, that only truly tasteless jokes should be posted to this group. Moreover, since the whole group is considered tasteless, no precautions are taken to ensure that you don't encounter offensive material. By definition, EVERYTHING in this group is offensive (or should be).

If you are truly into things tasteless, there are a number of other non-humor newsgroups that may appeal to you. They are:

[alt.tasteless](#)

[alt.tasteless.pictures](#)

[alt.binaries.pictures.tasteless](#)

The [alt.tasteless](#) group is for discussion of tasteless and disgusting topics. We warn you not to look in this group if you are easily offended (or before a meal). The other two groups are for sharing tasteless pictures.

In some Usenet groups, the Rot-13 scheme is used to encode potentially offensive material. When you encounter such an article, you can use your newsreader to decode it for you. With Unix, the Rot-13 procedure can be implemented by the following command:

```
tr '[a-m][n-z] [A-M][N-Z]' '[n-z][a-m][N-Z][A-Z]
```

Simply type this command at the Unix prompt. Then, type one line at a time and Unix will translate for you. When you enter a line of regular text, this command will encode it. When you enter a line of encoded text, this same command will decode it.

As an example, you may want to decode the secret Rot-13 message within the main part of this article. If you want to find out more about the `tr` (translate) command, you can display the documentation from the online Unix manual by using the command:

`man tr`

To continue: One of the most popular Usenet humor groups is:

[rec.humor.funny](#)

This group is moderated and, hence, contains only "funny" material. If you want to post something to this group, you must submit it to the moderator who will decide if it is good enough.

Another great place to check for funny stuff is the newsgroup:

[alt.humor.best-of-usenet](#)

People from all over the Net send in their favorite humor articles to a moderator, who makes sure that there are no duplications. This newsgroup is handy if you don't have time to read every article

in every group looking for things to laugh at. For discussion of the material in this group, there is the unmoderated group:

[alt.humor.best-of-usenet.d](#)

While we are on the subject, we would also like to mention the newsgroup:

[alt.best.d.internet](#)

This group contains re-postings of the best articles from all over Usenet (not just funny stuff).

If you love puns, or love to hate puns, spend some time reading:

[alt.humor.puns](#)

It will certainly make you wonder if Man is really Nature's last word.

Of course, in the days of early Greek civilization, when men were men and women weren't, there was less doubt as to whom was wise and talented. In those days, one might travel for miles to hear the wisdom of the Oracles: farsighted individuals with the gift of foretelling the future and explaining Life. (That is, the type of people who today invest in derivatives and take Prozac.)

On the Net, the trip is a lot shorter. All you have to do is send a question to the Usenet Oracle and, in short order, you will receive sage and witty advice that will make you feel better whether it actually solves your problem or not. The newsgroup to which you can send your questions and read all the replies is:

[rec.humor.oracle](#)

If you want to discuss the Oracle's wisdom, you can do so in the group:

[rec.humor.oracle.d](#)

After you receive your reply, it may happen that the Oracle will ask you for some assistance. (After all, providing advice to the entire Net is a time-consuming process and even the Oracle needs an occasional hand.) For example, the Oracle just might send YOU a question and ask you to help out by answering the question to the best of your ability. Later, you may find your answer in the newsgroup. This could mean one of two things.

It might mean that your reply was so perceptive that the Oracle in its infinite wisdom decided to leave it exactly as you wrote it, changing not a single word. Alternatively, we have a different theory. We'll tell you, but don't tell anyone else.

It just may be that, when the Oracle receives a question, it sends it to someone else to answer and then sends the reply to you. Later, when it receives another question, it sends it to you and asks for your help. Could this mean that there really isn't an Oracle? That the whole thing is run by a computer program that receives queries and farms them out to other people who... Now, it couldn't be. We know there's a real Oracle: Santa Claus told us.

Moving from the sublime to ridiculous, we arrive at cascades: long, silly, meaningless curiosities that originated on Usenet. The cascade newsgroup is:

[alt.cascade](#)

But when reality offers a smack on the head and you need to bite back with authority, it's time to check out:

[alt.shenanigans](#)

Never again will you be lacking for the appropriate prank to play on your annoying roommate or that pesky co-worker.

Perhaps the biggest practical joke in the universe is that we live on a planet full of people who know that they will die some day, but who are programmed to want to live forever. Notwithstanding the fact that this dichotomy makes life as a human being more interesting than say, a rock or a tree or a Republican, there is a certain amount of angst and irrelevant denial percolating through the coffee pot of Life. And some of the best comments on this condition can be found in the newsgroup:

alt.atheism satire

Truly, humor on Usenet is not confined to jokes. There are many newsgroups that are for discussing funny people: actors, comedians, writers, and so on.

Still, humor on Usenet is not confined to jokes. There are many newsgroups that are for discussing funny people: actors, comedians, writers, and so on.

alt.fan.dice-man (Andrew Dice Clay)
alt.fan.letterman (David Letterman)
alt.fan.pratchett (Terry Pratchett, Sci-Fi Writer)
alt.fan.wodehouse (P.G. Wodehouse, English writer)
alt.fan.woody-allen (Woody Allen)
alt.fan.greg-kinner (Greg Kinnear, host of Talk Soup)
alt.fan.mel-brooks (Mel Brooks)
alt.fan.penn-n-teller (Penn and Teller, magicians)
alt.fan.dave_barry (Dave Barry)

There are also groups devoted to various types of comedy:

alt.comedy.british (British humour)
alt.comedy.british.blackadder (Black Adder, British TV program)
alt.comedy.firesign-theatre (Firesign Theatre)
alt.fan.firesign-theatre (Firesign Theatre)
alt.fan.monty-python (Monty Python)
alt.fan.goon (Goon Show, radio comedy)
alt.comedy.slapsick-3-stooges (Three Stooges)
alt.comedy.standup (Stand-up comedy)
alt.comedy.vaudeville (Vaudeville comedy)
alt.tv.comedy-central (Comedy Central, cable TV)
alt.tv.rd-dwarf (Red Dwarf, Sci-Fi television)
rec.music.dementia (Dr. Demento, radio show)

HUMOR ARCHIVES

When the time comes that a quick joke is just not enough, there are archives galore on the Net that can keep you laughing indefinitely. Here are some cool ftp sites to try:

catthouse.org
Path: /pub/catthouse/humor

ocf.berkeley.edu
Path: /pub/Library/Humor

slopoke.mlb.smi.harris.com
Path: /pub/doc/humor

quartz.rutgers.edu
Path: /pub/humor

gatekeeper.dec.com
Path: /pub/mis/humor

rascal.ca.utexas.edu
Path: /misc/funny

ftp.spies.com
Path: /Library/Humor/

With a gopher, you can access the wonderful Wiretap Online Library. The address is: wiretap.spies.com

Once you connect, choose: Wiretap Online Library | Humor

Hint for web users. If you use a Web browser (such as Mosaic or Lynx), you can access an ftp or Gopher site by specifying the address as a URL (Universal Resource Locator). For example, consider the first ftp site we mentioned above.

catthouse.org
Path: /pub/catthouse/humor

You can always access this archive using an ftp program. However, your web browser can do the job as well. In this case, you would give it the following URL:

ftp://catthouse.org/pub/catthouse/humor

(Be sure that you do NOT put a "/" character at the end of the URL.)

Aside from general humor archives, there are special collections. For a large assortment of canonical lists (such as all the blond jokes, lawyer jokes, and so on), you can check out the following ftp site:

ccc.csiltech.edu
Path: /pub/humor/canonical/lists/

With a web browser, you can use:

http://www.cs.cdu.edu/~cashman/humor.html

For a list of classical practical jokes, ftp to:

sif.tucornell.edu
Path: /shenigans/

There is also a nice collection of regular jokes at the Wiretap facility. Via ftp, use:

ftp.spies.com
Path: /Library/Humor/Jokes/

With a gopher, connect to:

wiretap.spies.com

and then choose:

Wiretap Online Library | Humor | Jokes

If you are interested in computer-oriented humor, there are two ftp sites that you will like:

ftp.uu.net
Path: /doc/literary/jobi/NerdHumor/

ftp.uu.net
Path: /doc/literary/jobi/DEChumor/

Finally, if all you want is a simple daily fix, you might try the limerick server. All you have to do is finger the following address and you will see a humorous limerick:

finger limerick@bronze.csi.com

As you might imagine, some of these limericks can be more than a bit earthy, so if you are showing your local clergyman how the Internet works, you are probably better off with the blond jokes.

Hint: If you are a Unix user, put the preceding finger command in your .login file, so that every time you log in you will see an inspiring limerick.

CARTOONS AND COMIC STRIPS

Aside from jokes, the Net also has a few cartoons and comic strips that you can download or view with a graphical browser. One of our favorites is a strip called "Where the Buffalo Roams," by Hans Bjordahl. The URL is:

http://xor.com:80/lwbr/

Two others are "Dilbert" (a comic strip) by Scott Adams, and "Doctor Fun" (a single panel cartoon) by David Farley. Both comics are available via the web at the following location:

http://hseml.gnn.com/gnn/news/comix/index.html

If you enjoy Dilbert, you may want to send a message to Scott Adams. His address is: scottadams@aol.com

Doctor Fun is available in several other places around the Net, such as:

http://sunsite.unc.edu/Dave/dr/fun.html

With a gopher, you can also find Doctor Fun at the SunSITE Archive (well worth checking out on its own). Point your gopher to:

sunsite.unc.edu

Then choose:

Worlds of SunSITE | Doctor Fun

The last cartoon we want to mention is drawn by John Zakour. His cartoons are related to computers, and he posts new ones every week. To see these cartoons, use your web browser to access:

http://web.nyssa.cornell.edu/CGI/cloons.cgi

From the web pages, you can not only view cartoons, you can also look at an online electronic book called "The Doomeday Brunette," written by Zakour. The first three chapters are free. If you like what you see, you can then pay real money for the entire book in electronic format.

HUMOR MAILING LISTS

There are a number of mailing lists devoted to things funny. Here are three to which you might want to subscribe.

For funny stories and anecdotes, try:

giggles@vtvm1.cc.vt.edu

The subscription address is:

listserv@vtvm1.cc.vt.edu

For contemporary humor and discussions about humor, there is:

humor@uga.cc.uga.edu

The subscription address is:

listserv@uga.cc.uga.edu

Finally, for general jokes and humor, you can subscribe to:

humor-l@cornell.edu

The subscription address is:

listserv@cornell.edu

Notice that all of these are Listserv mailing lists. To subscribe to such a list, mail a message to the subscription address. You do not need to use a subject in the message. In the body of the message, put a single line with the word **subscribe**, followed by the name of the mailing list, followed by your full name. Make sure to send the subscription request to the "listserv" address, not to the regular address.

For example, say that your name is Ben Dover. To subscribe to the "Giggles" mailing list, you would send a message to:

listserv@vtvm1.cc.vt.edu

The message should contain only a single line:

subscribe giggles Ben Dover

If you want more information about mailing lists, see Chapter 25 in Hartley's book "The Internet Complete Reference." ♦

THE MS "PRESS RELEASE"

The following is a wonderful example of the type of humor that you can find on the Net. This "press release," written by Hank Vorjes, was posted to the Usenet group alt.atheism.satire by Randy Parsons. Such humorous items circulate quickly within the Net community.

MICROSOFT Bids to Acquire Catholic Church

By Hank Vorjes

VATICAN CITY (AP) — In a joint press conference in St. Peter's Square this morning, MICROSOFT Corp. and the Vatican announced that the Redmond software giant will acquire the Roman Catholic Church in exchange for an unspecified number of shares of MICROSOFT common stock. If the deal goes through, it will be the first time a computer software company has acquired a major world religion.

With the acquisition, Pope John Paul II will become the senior vice-president of the combined company's new Religious Software Division, while MICROSOFT senior vice-presidents Michael Maples and Steven Ballmer will be invested in the College of Cardinals, said MICROSOFT Chairman Bill Gates.

"We expect a lot of growth in the religious market in the next five to ten years," said Gates. "The combined resources of MICROSOFT and the Catholic Church will allow us to make religion easier and more fun for a broader range of people."

Through the MICROSOFT Network, the company's new on-line service, "we will make the sacraments available on-line for the first time" and revive the popular pre-Counter-Reformation practice of selling indulgences, said Gates. "You can get Communion, confess your sins, receive absolution — even reduce your time in Purgatory — all without leaving your home."

A new software application, MICROSOFT Church, will include a macro language which you can program to download heavenly graces automatically while you are away from your computer.

An estimated 17,000 people attended the announcement in St Peter's Square, watching on a 60-foot screen as comedian Don Novello — in character as Father Guido Sarducci — hosted the event, which was broadcast by satellite to 700 sites worldwide.

Pope John Paul II said little during the announcement. When Novello chided Gates, "Now I guess you get to wear one of these pointy hats," the crowd roared, but the pontiff's smile seemed strained.

The deal grants MICROSOFT exclusive electronic rights to the Bible and the Vatican's prized art collection, which includes works by such masters as Michelangelo and Da Vinci. But critics say MICROSOFT will face stiff challenges if it attempts to limit competitors' access to these key intellectual properties.

"The Jewish people invented the look and feel of the holy scriptures," said Rabbi David Gottschalk of Philadelphia. "You take the parting of the Red Sea — we had that thousands of years before the Catholics came on the scene."

But others argue that the Catholic and Jewish faiths both draw on a common Abrahamic heritage. "The Catholic Church has just been more successful in marketing it to a larger audience," notes Notre Dame theologian Father Kenneth Madigan. Over the last 2,000 years, the Catholic Church's market share has increased dramatically, while Judaism, which was the first to offer many of the concepts now touted by Christianity, lags behind.

Historically, the Church has a reputation as an aggressive competitor, leading crusades to pressure people to upgrade to Catholicism, and entering into exclusive licensing arrangements in various kingdoms whereby all subjects were instilled with Catholicism, whether or not they planned to use it. Today Christianity is available from several denominations, but the Catholic version is still the most widely used. The Church's mission is to reach "the four corners of the earth," echoing MICROSOFT's vision of "a computer on every desktop and in every home".

Gates described MICROSOFT's long-term strategy to develop a scalable religious architecture that will support all religions through emulation. A single core religion will be offered with a choice of interfaces according to the religion desired — "One religion, a couple of different implementations," said Gates.

The MICROSOFT move could spark a wave of mergers and acquisitions, according to Herb Peters, a spokesman for the U.S. Southern Baptist Conference, as other churches scramble to strengthen their position in the increasingly competitive religious market. ♦

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8400	2	2-15	**1Epp	N/A	N/A	No	ISA	45.95
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9073	4	2-15	2Uni	N/A	N/A	No	ISA	89.95
8500	2	2-5	*1-83	4	2	Yes	ISA	53.35
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GOPHER BY E-MAIL

by Bob Rankin

Gopher is an excellent tool for exploring the Internet and it's also the best way to find a resource if you know what you want, but not where to find it. Gopher systems are menu-based, and provide a user-friendly "front-end" to Internet resources, searches and information retrieval.

Let's face it...the so-called "Information Superhighway" has got potholes big enough to swallow Al Gore whole. Without a tool like Gopher, you'd have to wander aimlessly through the Internet jungles and swamps to find the treasures you seek.

Gopher knows where things are, thanks to the many volunteers who spend time creating pointers to useful collections of "Net resources". And Gopher takes the rough edges off of the Internet by automating remote logins, hiding the sometimes-cryptic command sequences, and offers powerful search capabilities as well.

ARE YOU ACCESS-IMPAIRED?

If you don't have direct access to the Internet through your BBS or online service, you're not alone. As of late 1994, half of the 150 countries with Internet connections had e-mail only access to the world-wide Internet.

But if you think that sounds limiting, read on. You can access almost any Internet resource using e-mail, including Gopher. And even if you do have direct Internet access, you may find that using Gopher by e-mail can save you time and money.

When visiting a Gopher site using a "live" Internet connection, one would specify the name of the site, navigate through a series of hierarchical menus to a desired resource, and then either read or transfer the information back to their home system.

Using Gopher by e-mail is very similar, except that the desired site is reached through a special "gopher-mail server" which gophers to the remote site on your behalf and returns the requested menu, submenu or file to you in response to a set of commands in an e-mail message.

LET'S HAVE A CONVENTION

In the instructions that follow, you may also be told to "send e-mail with a blank subject" to some address. This means to simply leave the "Subject:" field blank in your message. If your mailer refuses to send messages with a blank subject, give it some dummy value. In most cases this will work fine.

Gophermail servers understand only a small set of commands and are not very forgiving if you deviate from what they expect. So include **ONLY** the specified commands in the "body" of your note and leave off any extraneous lines such as your signature, etc.

Pay attention to upper/lower case in directory and file names when using e-mail servers. *It's almost always important!*

DIG IT

Although not every item on every menu will be accessible by "gopher mail," you'll still find plenty of interesting things using this technique. Down to brass tacks...let's send e-mail to one of these addresses:

gophermail@calvin.edu (USA)
gopher@earn.net (France)
gopher@dsv.su.se (Sweden)
gomail@ncc.go.jp (Japan)

Leave the Subject blank, enter HELP in the body of the note, and let it rip. You'll soon receive by e-mail the text of the main menu at the gophermail site you selected.

You can optionally specify the address of a known gopher site on the Subject line to get the main menu for that site instead. Here are some interesting gopher sites you may like to explore at your leisure.

cwis.usc.edu
gopher.micro.umn.edu
english-server.hss.cmu.edu

Let's be bold and skip the HELP stuff for now. Fire off a note to one of the gophermail servers and specify "Subject: cwis.usc.edu". You'll get a message back from the server that looks something like this:

Mail this file back to gopher with an X before the items that you want. If you don't mark any items, gopher will send all of them.

1. About USCgopher/
2. How To Find Things on Gopher/
3. University Information/
4. Campus Life/
5. Computing Information/
6. Library and Research Information/
7. Health Sciences/
8. Research and Technology Centers/
9. Other Gophers and Information Resources/

You may edit the following numbers to set the maximum sizes after which GopherMail should send output as multiple e-mail messages:

Split=27K bytes/message <-For text, bin, HQX messages
Menu=100 items/message <-For menus and query responses

```
#
Names>About USCgopher
Num=1
Type=1
Port=70
Path=/About_USCgopher
Host=cwis.usc.edu
# ... (some lines deleted) ...
Names=Other Gophers and Information Resources
Num=9
Type=1
Port=70
Path=/Other_Gophers_and_Information_Resources
Host=cwis.usc.edu
```

Bob Rankin, known as "Doctor Bob" in the online world, is a computer programmer and consultant who enjoys exploring the Internet and sharing the fruit of his experience with others. His free guide "Accessing The Internet By E-Mail" has circulated widely on the Internet, resulting in a daily flood of comments, questions & kudos by e-mail. Rankin has also authored "100 Cool Things To Do On The Internet" and "Doctor Bob's Internet Business Guide", which are available for \$5.00 each. For more info, the author can be reached by e-mail at "BobRankin@Delphi.Com".

To proceed to a selection on the returned menu just e-mail the whole text of the note (from the menu downwards) back to the gopher server, placing an "x" next to the item(s) you want to explore. You'll then receive the next level of the gopher menu by e-mail. Some menu choices lead to other menus, some lead to text files, and some lead to searches. In the example above, let's select

x 9. Other Gophers & Info Resources

and mail the whole shebang right back at the Gophermail server. You should then get a menu with a number of interesting selections including "Gopher Jewels." You'll find a LOT of good stuff along that path. The Gopher Jewels project is probably the best organized collection of Internet resources around.

If a menu item is labelled "Search" you can select that menu item with an "x" and supply your search words in the "Subject" of your next reply. Note that your search criteria can be a single word or a boolean expression such as:

document and (historical or government)

Each of the results (the "hits") of your search will be displayed as an entry on yet another gopher menu!

Note: You needn't actually return the entire gopher menu and all the routing info that follows it each time you reply to the gophermail server. If you want to minimize the size of your query, you can strip out the "menu" portion at the top and include only the portion below that pertains to the menu selection you want (leaving the Subject blank). The example below is equivalent to selecting "option 9" as we did earlier.

```
Split=OK bytes/message
Menu=0 items/message
#
Name=Other Gophers
Numb=9
Type=1
Port=70
Path=/Other_Gophers_and_Information_Resources
Host=cwis.usc.edu
```

If this message looks like nonsense to you, here's a human translation:

Connect to PORT 70 of the HOST (computer) at "cwis.usc.edu", retrieve the sub-menu "Other Gophers and Information Resources," and send it to me in ONE PIECE, regardless of its size.

"NOTHING HAPPENS"

Remember the old "Adventure" computer game? Every time you said "eat dwarf" or "throw knife", there was that maddening reply. Sometimes gophermail can be like that. If you get a totally blank reply or a message prompting you to select items from a menu that's not there, it's most likely because the server failed to connect to the host from which you were trying to get your information. Send your request again later and it'll probably work.

A BIT OF COMIC RELIEF

Speaking of searches, this is a good time to mention Veronica. Just as Archie provides a searchable index of FTP sites, Veronica provides this function for "gopherspace." Veronica will ask you what you want to look for (your search words) and then display another menu listing all the gopher menu items that match your search. In typical gopher fashion, you can then select one of these items and "gopher it"! To try Veronica by e-mail, look again at that sub-menu returned by the "option 9" request we did before. Select the menu item labelled "Gophers by Keyword Search (Veronica)" and you should get a list of several Veronica servers that are at your disposal. You'll have to select one (or more) Veronica servers to handle your query, specifying the search words in the Subject of your reply. Here's another example of where using e-mail servers can save time and money. Often the Veronica servers are very busy and tell you to "try again later". So select 2 or 3 servers, and chances are one of them will be able to handle your request the first time around.

A GOPHERMAIL SHORTCUT:

The path to some resources, files or databases can be a bit tedious, requiring several e-mail messages to the gophermail server. But here's the good news...If you've done it once, you can re-use any of the e-mail messages previously sent in, changing it to suit your current needs. As an example, here's a clipping from the Veronica menu you would get by following the previous instructions. You can send these lines to any gophermail server to run a Veronica search.

```
Split=32K bytes/message
Menu=100 items/message
```

```
#
Name=Search GopherSpace
Type=7
Port=2347
Path=
Host=empire.nysernet.org
```

Specify your search words in the Subject line and see what turns up. For a challenge, see if you can find a list of tollfree phone numbers for airlines floating around out there!

WE GOT CULTURE IN CYBERSPACE

Here's a bit more fun before we wrap. Send these lines to your favorite gophermail server and let me know how the chicken comes out.

```
Name=Beowulf (F.B. Gummere - 150K)
Type=0 (Text)
Port=70
Path=/Library/Classic/beowulf.txt
Host=wiretap.spies.com
#
Type=0
Port=70
Name=Worst 100 Singles of last 25 Years
Path=/Library/Music/Lists/worst100.25
Host=wiretap.spies.com
Port=70
#
Type=0+
Name=chicken-curry
Path=/Fun/Recipes/Meats/Fowl/chicken-curry
Host=spinaltap.micro.umn.edu
Port=70
#
```

VOICE OVER THE INTERNET

A couple of issues ago we described an "IP Phone" we'd like to see developed. Basically, a PC based voice phone that would work over the Internet in IP packets.

This month, we found one. The long distance voice telephone carriers need not quake in fear however. It's a bit shy of actually communicating, but it's an interesting start.

A group calling themselves microWonders, Inc., has launched a project in Microsoft Visual C++ and WINSOCK to transmit sound over the Internet with Windows programs. They call it the Internet Global Phone Project or IGP for short. It's a simple program to record sound and send it to another IP address. It's intended as a technology demonstration project for two-way real-time voice exchange over the net.

The program is at this stage quite simple. It consists of an executable MPHONE.EXE and a winsock library DLL program. Source code is ostensibly freely distributed, though we've yet to find it. The program itself virtually has NO configuration to it. But it does require you to have a sound card in your PC with working speakers and microphones. This may take some fiddling with your mixer program to get the microphone recording at a good level.

We played with this thing over a local TCP/IP network and with Kevin Behrens in Chicago via a 56 KB leased line. But the authors insist it will work over a 14.4 kbps SLIP account.

The program only has three functions - available from buttons. A folder button allows you to specify the numeric IP address that you want to talk to. A red button allows you to record sound. And a yellow lightning bolt button allows you to send the sound packet to the selected IP address. The program acts as both a client and a server. So if the person at the PC with the destination IP address has a sound card and IGP up as a server, they will hear the sound you send.

You can specify your OWN IP address for testing purposes to see how it will sound. But we did receive sound from Kevin Behrens at Aquila BBS in Aurora Illinois. The sound quality is discernable, but barely. And it is very dependent on the sound system you have set up on your PC. Gary Funk's Creative Labs Soundblaster AWE32 system actually does quite well with it. My Soundblaster 16 MultiCD doesn't do nearly as well, and in fact, there is the distinct background noise of a sink running water from mine.

The program basically records a sound element. When you "send" it it compresses it and sends it over the network. The client end of it at the destination address decompresses and reassembles the sound file, and then plays it. It will work with any Winsock TCP/IP interface, and we used it with the Trumpet Winsock program to some modest success.

We found the program in version 1.02 in two files - IG16 102.ZIP for 16-bit soundcards, and IGP8 102.ZIP for 8-bit cards. Virtually no contact information about the program was evident beyond that it was developed by microWonders, Inc., and you can send comments to lsing@hookup.net.

HONG KONG DIRECTORY ON THE NET

The "Hong Kong Business Directory (TM)" is a free service on the World Wide Web that allows Internet users all over the world to source products, find manufacturers, locate importers and exporters, find hotels, services, suppliers, buyers, even individuals in Hong Kong. There are over 123,400 entries in the Directory and it can be searched by "keywords." Most entries are company or individual names only. Some entries have additional information such as "product list" or "catalog" which the search engine also looks at. Entries with graphic catalogs available are clearly marked for easy identification.

In addition, users can also send "inquiries" directly to any company for free by simply filling in a "form" presented on the screen, provided the software used supports the "form" function.

Because a lot of companies from China, Taiwan, Korea, Japan and Singapore also have branch offices in Hong Kong, users of this Directory can reach a lot of companies from those countries also.

There is another additional service - "multiple inquiries," which allows the user to send inquiries to more than one company at one time. To avoid potential abuse of this service, there is a small charge for it. Users of this service must pre-register with FarEast.Com, the publisher of this Directory, first before using the service.

Mr. Chu of FarEast.Com states that this Directory, besides being a business with potential, is also a service to promote all the business in Hong Kong and to help them to distribute their product information to all their perspective customers anywhere in the world, and also a service for all the business people in the world to look for valuable contacts in Hong Kong and Asia quickly and easily, and to communicate with them quickly and inexpensively.

The "Hong Kong Business Directory (TM)" is located on the World Wide Web at <http://FarEast.Com/HongKong/directory.html>. Inquiries to jlmchu@FarEast.Com ♦

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CICNet 2901 Hubbard St. Ann Arbor, MI 48109 Voice: (313)998-6103 Fax: (313)998-6105 Email: info@cic.net	\$89.95 w/Software setup \$25 w/o Software setup 19.95 per month \$2.75 hr after 25 hours	MCSNet 3217 N. Sheffield Chicago, IL 60657 Voice: (312)248-UNIX Fax: (312)248-8649 BBS: (312)248-0900 Email: info@mcs.com	\$2.00 hour first 5 hours \$1.00 thereafter in a calendar month \$15.00 month minimum
CNS Internet Express 1155 Kelly Johnson Blvd. Ste 400 Colorado Springs, CO 80920 Voice: (800)748-1200 (719)592-1240 Fax: (719)592-1201 Email: info@cscns.com	\$11.95 month \$2.75 hour after 4 hours \$29.95 month 1.25 after 20 hours	MRNet 511 11th Ave South Box 212 Minneapolis, MN 55415 Voice: (612)342-2570 Fax: (612)344-1716 Email: dfazio@mr.net	\$175 setup \$199 monthly
Clark Internet Services 10600 Route 108 Ellicott City, MD 21042 Voice: (800)735-2258 (410)730-9764 Fax: (410)730-9765 BBS: (410)730-9786 Email: info@clark.net	\$33 month 6 hours daily \$1 per hour beyond 6	Magibox 1873 Hidden Oaks Drive Memphis, TN 38138 Voice: (901)757-7835 Fax: (901)757-5875 Email: net.info@magicbox.net	\$75 Annual \$75 month \$2 past 40 hour \$35 annual \$35 month
Colorado Supernet Colorado School of Mines 1500 Illinois St. Golden, CO 80401 Voice: (303)273-3471 Fax: (303)273-3475 Email: info@csn.org	\$3 hour \$40 registration \$15 month minimum \$250 month maximum	Merit/MichNet 2901 Hubbard Pod G Ann Arbor, MI 48105 Voice: (313)764-9430 Fax: (313)747-3185 Email: info@merit.edu	PPP Dial up \$40 registration \$35.00 month
CyberGate, Inc. 662 South Military Trail Deerfield Beach, FL 33442 Voice: (305)428-4283 Fax: (305)428-7977 Email: info@gate.net	\$20 month includes 10 hrs \$1 hour above 10 hrs \$50 setup fee	NETCOM 4000 Moorpark Avenue Suite 209 San Jose, CA 95117 Voice: (408)554-8649 Fax: (408)241-9145 Email: info@netcom.com	\$25 setup 19.95 month 40 hrs prime unlimited non-prime Requires NetCruiser stfw
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INTERNET SLIP HOST LIST

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Dallas, TX 75207
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Fax: (214)746-4856
Email: info@onramp.net

\$39.00 setup
\$39.00 month
\$111.15 three months
\$210.60 six months

VoiceNet/DSC
17 Richard Road
Ivyland, PA 18974
Voice: (215)674-9290
(800)521-2733
Fax: (215)674-9662
Email: info@voicenet.com

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\$19.95 mo Personal
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\$300 setup unlimited

PANIX
Voice: (212)787-6160
Email: info@panix.com

\$35 month

XNet
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Lisle, IL 60532
Voice: (708)983-6064
BBS: (708)983-6435
Email: info@xnet.com

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Fax: (617)375-0201
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Fax: (713)917-5005
Email: sales@sccsi.com

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800# \$1.15 minute

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- ANSI, RIPscript & WIP graphics protocol support for all database functions (DOS & Windows Access)
- Complete entry screen validation via pick lists
- Easily jumps from browse to detail viewing

PHOTOGRAPHS IN SECONDS

- Support for the following image formats: JPG, CMP, PCX, BMP, TIF, TGA and GIF



RELIABLE MULTI-USER CAPABILITIES

- Support for multiple users running separate copies of DC Genesys on the same computer (ie: DesQView) or on separate computers on a LAN network
- Seamless sharing of data with concurrent Database/FoxPro applications on the same LAN

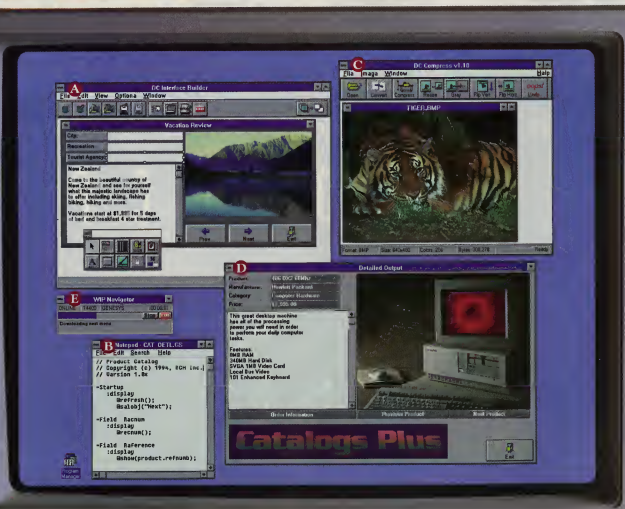


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- Network Compatibility
- Complete Sysop Defined Security for Every Feature
- Multinode Chat with User Defined Macros
- Royalty-Free Distribution of Client Software
- DigBoard Support

- A WIP Main Menu**
create beautiful native Windows menus with sound, text, icons and compressed images for users to view
- B Company Identity**
example of WIP image capabilities to showcase company products
- C Application Icons**
WIP buttons with Windows icons
- D Messages**
post bulletins and respond to message threads with spell checking capability
- E WIP Navigator**
indicates WIP menu status
- F Status Bar**
shows status of online session and indicates new mail
- G Chat**
live teleconferencing with other members currently online
- H Chat Forum**
choose from multiple forums the one you wish to join
- I Write E-Mail**
write E-Mail with attached images





ACCESS TO GOVERNMENT

by Jim Warren

ACT NOW TO STOP BIG BROTHER

Let the People beware! "Government Access" is bi-directional — this column concerns government accessing citizens as much as it concerns citizens accessing government.

THE DEATH OF FREEDOM AND PRIVACY IN AMERIKA

Jim Warren [345 Sweet Rd., Woodside CA 94062; (415)851-7075; jwarren@well.com] received the first year Electronic Frontier Foundation Pioneer Award, and more recently the James Madison Freedom-of-Information Award from the Society of Professional Journalists Northern California for helping to make government information freely available online. He is now pushing for similar access to campaign-finance disclosures. He founded *InfoWorld* and the Computers, Freedom & Privacy conferences, was founding host of PBS' television's "Computer Chronicles" and founding Editor of *Dr. Dobb's Journal*, among other things.

Mark your calendars: October, 1994 was the birth of automated remote national surveillance of this nation's citizens, covertly imposed on almost anyone who is of any interest to any insider who can get access to the system and is willing to use it.

Most especially, this includes every incumbent government employee, bureaucrat, appointee and politician who might take advantage of their position for personal gain or to enhance their political power.

Literally in the dark of night, at about 9:30 p.m. on October 10th, the U.S. Senate passed House Resolution 4922, that had been stampeped through a debate-free floor vote in the House two evenings earlier; individual members' votes were not recorded.

First introduced only two months earlier, H.R. 4922 was fast-tracked through minimal public hearings where Clinton administration officials systematically stone-walled requests and even Freedom-of-Information demands, withholding timely access to crucial information about the bill's highly-questionable justification.

First, I'm going to illustrate how draconian this law really is, then I'll propose some citizen actions by which we can reduce its Orwellian capabilities — if enough of us act quickly and effectively.

IT'S REALLY AS BAD AS IT SOUNDS

H.R. 4922 — officially entitled, "Interception of Digital and Other Communications," but which states that it "may be [misleadingly] cited as the 'Communications Assistance for Law Enforcement Act' — requires that all U.S. common carriers implement undetectable, remote wiretapping-of-anyone, at-a-keystroke, for use by ill-identified local, state and federal agencies.

The bill says it is, "to make clear a telecommunications carrier's duty to cooperate in the interception of communications for law enforcement purposes, and for other purposes." [emphasis added]

EAGERLY AWAITED BY CRACKERS AND SPIES

If any telecom carrier implements this in a less-than-perfect way, it will also give global computer crackers, phone freaks, industrial spies and foreign governments equal access to this nation's political, business and personal communications.

Do you know of any public phone system in the nation — wired or wireless — that *hasn't* been cracked? Repeatedly? (Or are all those high-profile horror stories about vile computer crackers and evil billion-dollar phone-freaking that have aired on Geraldo and the evening news just law-enforcement lies?)

READ IT AND WEEP

Don't accept this or anyone else's analyses or rationalizations of what this legislation does or does not mandate — read it for yourself. The Electronic Frontier Foundation has extensive information about the bill available online, as well as its full-text, at ftp.eff.org/as/pub/X, at gopher.eff.org/as/1/X, and by WWW or Mosaic at <http://eff.org/pub/X>, where "X" is "EFF/Policy/Digital_Telephony/digitel94.bill".

Or you might be able to wheedle a copy out of your local Congress-critter if you're properly-subservient to them.

The following are some of the most-significant mandates of H.R. 4922, verbatim:

SECRET AUTHORIZATIONS FOR ITS USE

H.R. 4922 requires that, "[With insignificant exceptions], a telecommunications carrier shall insure that its equipment, facilities, or services [for customers' communications] are capable of (1) expeditiously isolating and enabling the government, pursuant to a court order or other authorization, to intercept, to the exclusion of all other communications, all wire and electronic communications carried by the carrier within a service area to or from equipment, facilities or services of a subscriber of such carrier concurrently with their transmission to or from [the subscriber]; (2) [mandates similar government access to call-identifying information] ..."

Note: Executive-branch agencies will be the users of this national surveillance system. Judicial-branch court orders provide a pretense of a balance of power to control inappropriate executive-branch uses.

But what about that subtle little "other authorization" phrase? What other surveillance authorizations exist — or will be authorized in the future? We don't know.

Some current authorizations are undoubtedly secret — for the National Security Agency, the Federal Bureau of Investigation that didn't use its wiretap information to stop the World Trade Center bombing, the Secret Service that faithfully serves and protects the President, the Defense Intelligence Agency in a department that has a huge budget to protect, the Central Intelligence Agency where Soviet-spy Aldridge Ames held a powerful position for so many years, etc.

What "other authorization" does the Internal Revenue Service already have, even though it recently reported investigating more than 1,300 of its employees for making unauthorized use of their authorized access to IRS files, or the Drug Enforcement Agency that makes so much money from its drug raids?

WIRETAP-FROM ANYWHERE REQUIRED BY LAW

Continuing the preceding bill-text, it also requires, "(3) delivering intercepted communications and call-identifying information to the government, pursuant to a court order or other lawful authorization, in a format such that they may be transmitted [by government equipment] to a location other than the premises of the carrier ..."

The idea is that electronic communications from anywhere in the nation, to anywhere in the nation, can be automatically copied to any appropriately-equipped surveillance site in the world. But only when authorized by somebody, of course.

Could this help vice detectives eager to bust prostitutes — even perhaps those who serve business and civic leaders, lobbyists and powerful politicians who control police budgets — or social-service agencies pursuing child-support scofflaws? After all, collecting child-support payments was the ridiculous excuse given for requiring that social-security numbers be included on some states' driver licenses.

KEEP GOVERNMENT ACTIONS SECRET

The bill-text continues, "(4) [provide these wiretaps] unobtrusively and with

a minimum of interference with any subscriber's telecommunications service and in a manner that protects...information regarding the government's interception of communications and access to call-identifying information.

Only if there's an emergency, then "a carrier at its discretion may comply with [delivering intercepted signals to government surveillance sites] by allowing monitoring at its premises if that is the only means of accomplishing the interception or access."

This reinforces the intent that surveillance will normally be conducted from whatever remote sites are most convenient for our government overseers.

Other sections of the bill address mobile communications and tracking of subscriber-controlled call-redirection.

Still other sections mandate cooperation by telecom equipment manufacturers.

The bill includes extensive detail about how any communications company that fails to implement its government-wiretap automation requirements in a timely manner can be subjected to court orders enforcing this law.

So far, the bill does not apply to information services, private networks, nor does it make the carrier responsible for decrypting scrambled signals. So far.

48 MONTHS AND COUNTING

The telecom companies are required to have the system operational "within 3 years after the publication by the Attorney General of a notice of capacity requirements or within 4 years after the date of enactment of this title, whichever is longer," subject to tax-funds or rate increases paying those poor, destitute phone companies to implement the government's citizen-monitoring system.

HALF A BILLION TAX-DOLLARS, INITIALLY

"There are authorized to be appropriated to carry out this title a total of \$500,000,000 for fiscal years 1995, 1996, 1997, and 1998. Such sums are authorized to remain available until expended."

Note: The telecom industry's lobbyists worked extensively on this bill, *big time!*

TELECOM RATE-PAYERS CAN PAY FOR THE REST

Although the bill requires that telecom companies include government-surveillance facilities in their systems, it says that the government doesn't have to pay for implementing them whenever "the equipment, facility, or service has been replaced or significantly upgraded or otherwise undergoes major modification."

Now who do you think is going to pay for the government's electronic peep-holes if tax-funds don't pay for them?

Further implying that rate-payers will pay some of the costs, the bill says that if the Federal Communications Commission is petitioned to determine what is "reasonably achievable," it must consider, among other things, "The effect on rates for basic residential telephone service."

\$125,000 PER WIRETAP

There were reportedly about 1,000 wiretaps officially authorized in 1993. H.R. 4922 authorized an average of a \$125-million per year for 1995-1998. That's \$125,000 for each wiretap per year!

Furthermore, only 80 to 200 of those wiretaps were reportedly complicated by involving digital telephony, which was the high-profile official justification for this bill.

But a lineman's clip-in telephone costs about \$100, and even ISDN handsets — capable of eavesdropping on digitized conversations — cost only a few hundred dollars.

Either the government's conducting a lot more wiretaps than are reported, or the administration and Congress is being obscenely wasteful of our taxes, simply to allow agents and bureaucrats to conduct national wiretaps more conveniently from their offices.

PUNY SECURITY AGAINST ABUSE

In the few months when Congressional committees pretended to give this bill a fair hearing, opponents urged that the Legislative and/or Judicial branches have mandated responsibility for overseeing how Executive-branch agencies use this surveillance system, thus restoring some semblance of a balance-of-power. They were ignored.

The only trivial safeguard against abuse by government clerks, bureaucrats, political appointees and elected officials states, "A telecommunications carrier shall ensure that any interception of communications or access to call-identifying information effected within its switching premises can be activated only in accordance with a court order or other lawful authorization and with the affirmative intervention of an individual officer or employee of the carrier acting in accordance with regulations prescribed by the [Federal Communications] Commission."

That's it. That's the entire text of the section entitled, "Systems Security and Integrity."

In other words, anyone in the government who wants to exploit their access to the system — for idle curiosity, personal gain or political power — will have to find someone in a phone company who can and will authorize its use — as a friend, or by falsified documents, bribes, blackmail or threats.

Could Watergate's Richard Nixon have found someone? Could Lyndon Johnson, who used the IRS to attack his political opponents, have done so? Could unremovable FBI Director-for-life J. Edgar Hoover have done so — who compiled the tens of thousands of covert surveillance reports on the nation's most-powerful law-abiding political leaders and opinion-makers that remain even after his staff destroyed 35 file cabinets of suddenly-unneeded dossiers, upon his death?

Could the CIA's Aldridge Ames have done so? Could George Bush's State Department appointee who sought records to embarrass Bill Clinton have done so? Could any of the 1,300 IRS employees who were investigated possibly have a friend working for the phone company? Could any of the dozen-or-so rogue cops who are annually disciplined or prosecuted for wrongdoing have such a contact?

IRRESPONSIBLE OVERSIGHT, CONGRESSIONAL STYLE

Although the greatest threat, by far, that this system poses is its abuse by those who have access to it, the only reports that Congress mandated concerned its implementation and costs.

Not a single phrase mandates reports about its actual uses, verifying their authorizations.

In fairness to Congress and its staff, this is just another example of new technological threats to civil liberties that few staffers and fewer elected officials are knowledgeable enough to understand.

Whether it is endless high-tech cost-overruns, or administrative desires for toys for trapping citizens, legislators simply *must* seek robust input from technologists beyond their Beltway hustlers.

The Executive branch that was once headed by Richard Nixon said, "Trust us." The administration's party once headed by Lyndon Johnson said, "Trust us." And the political appointee who now controls J. Edgar Hoover's FBI said, "Trust us."

And Congress obediently snuggled up to 'em, turned belly-up and continued to snore.

LET'S WAKE 'EM UP

Usually, mere citizens and state officials can't correct federally-legislated threats, arrogance or stupidity. This is different — state legislatures and state public utilities commissions (PUCs) clearly have authority to control telecom carriers operating within their jurisdictions.

And the computer nets provide potent tools for citizens to use effectively advocating state protections where Congress failed.

GOVERNMENT AGENTS DO NEED WIRETAPS

Few people argue that law enforcement and national-security agencies shouldn't be permitted to use properly-authorized, properly-supervised wiretaps.

The greatest danger of the system mandated by H.R. 4922 is that it is exclusively under the control of local, state and federal Executive-branch staff, bureaucrats, appointees and politicians — it has no mandated oversight, no counter-balance to its pervasive power.

RESTORING THE BALANCE OF POWER

What technology has wrought, technology can rectify:

The government's citizen-monitoring system mandated by H.R. 4922 could also monitor itself. Its implementation

would be only trivially-complicated by requiring that the telecom carriers' switching system automatically record source, destination, date and time of every call that it covertly transmits to government surveillance equipment — just like they record information about long-distance calls.

Then, just like a phone bill, the telecom company could automatically report those details to mandated oversight authorities.

Since Executive-branch agents are the system's users, the oversight reports should go to Legislative - and/or Judicial-branch overseers. E.g., copies should be sent to state legislatures' Judiciary Committee Chairs and state district appellate courts' Chief Justices for each state and district containing each calling number and each called number.

And Committee Chairs and Appellate Court Chief Justices should be required to verify the authorization for each wiretap thus reported to them.

Of course, distribution of such reports could be restricted by a court's restraining order, e.g. if legislators or judges are, themselves, being lawfully wiretapped.

As a final tidbit — maintaining the delusion that we are a free People and presumed innocent, rather than merely naive serfs in a police state — the telecom companies should also be required to retain copies of the reports, and later distribute them to each calling and called party that was the subject of government peeping, after perhaps two or five years, unless restrained by court order. Reciprocal government access.

DO IT BY STATE MANDATE

The reason I propose state legislative committees and state appellate courts is that we have a better chance of getting such a mandate enacted at the state level than with our technically-illiterate, slothful Congress that has proven it is too subservient to law'n'order lobbying by Washington insiders.

In fact, the state PUCs might be able to do it by regulation, bypassing the need for legislative politicking.

And finally, in the 24 states that permit citizen ballot initiatives, a citizen petition to this effect can, uh, "encourage" state legislators and PUC commissioners who may be too submissive to

federal whim to mandate fair protection for their citizens.

TIME IS THE ENEMY; ACT NOW!

There is a limited window of opportunity for such state mandates. The telecom carriers have probably barely begun designing their implementations. If such a reporting requirement is mandated before their design is completed and implementation begun, they could rather-easily include it.

And if only one state mandates this balance-of-power reporting system, most of the equipment manufacturers and telecom carriers will tend to include it in their systems — just in case a state in which they operate later requires it.

CLIP, COPY & ACT

Electronic copies of this are available every place that *Boardwatch* makes itself available electronically. Circulate it.

1. Clip this and copy it to the "Chief Consultant" of your state legislature's upper and lower-house Judiciary Committees, and to your local elected representatives in those bodies, along with a one-page personal letter.

2. Do the same to your federal House and Senate representatives. They need to know we care. (Hell! They need to know they've created a massive danger to themselves and all of us.)

3. Copy this to every technoid you know, as well as to your city-council members, county supervisors and senior state elected officials — pointing out that every one of them are threatened by the potential abuse of this system in unscrupulous local, state or federal hands. Note that local and state agencies will have access to the system.

4. Copy it to your local newspapers' editorial-page editors and to their high-tech reporters, if any.

5. Hand out copies at local meetings of technical, political, civic and business groups.

6. Blab about it all over the nets.

Eternal vigilance — and citizen action — is *still* the price of freedom. ♦

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Rea Andrew Redd lives and works in southwestern Pennsylvania where he manages a high school library, teaches European history and Scholastic Achievement Test preparation. On occasion, he reenacts American Civil War battles with the Ninth Pennsylvania Reserves, an historic, military impression unit. E-mail Rea at: redd@genesis.duq.edu

EDUCATION LINK by Rea Andrew Redd

LEARNING AT A DISTANCE GETS CLOSER TO HOME: PBS GOES ONLINE

Looking straight into the camera, Fred Rogers often asks "Will you be my neighbor?" In the quietness of your own very young heart, you may have at one time answered him, "Yes, I will be your neighbor." Soon you may be able to answer him in a way that you couldn't have imagined those many years ago in front of the television, eating Cheerios without milk out of a bowl.

The Public Broadcasting Service (PBS) has signed an agreement for one million First Class licenses with SoftArc Inc., a developer and manufacturer of cross-platform group communication software. SoftArc's workgroup software will be the foundation for a computer-based information network and internal communication system.

Hoping to create a model for collaborative programming, PBS struck the licensing agreement with the Canadian corporation for PBS ONLINE. Aiming for public television viewers, teachers, adult learners, and childcare providers, PBS ONLINE will be available through local public television stations. The network's goal is to provide access to resources, educational materials and interactive discussion conferences, which are linked to public television programming.

In addition, PBS plans to use FirstClass internally for station-to-station e-mail, workgroup conferencing and resource distribution in a subsystem called PBS EXPRESS. FirstClass servers will be located at local public television stations; users will be able to connect to services of their choice with virtually any type of computer. Electronic messaging, including Internet mail exchange with millions of users worldwide, will be provided to PBS ONLINE subscribers. In addition, conferencing, forms processing and access to information databases will be available. Down the road, the network will emphasize multimedia programming information that combines video, text, graphics, photographs and sound.

PBS ONLINE's goal is to expand, enhance and add value to the quality programs available through public television. For example, local television stations will be able to provide interactive conferencing sessions with, let us imagine, producer Ric Burns when your local PBS stations re-runs *The Civil War* or *Baseball* during a fundraiser.

Online access to programs' schedules will be an electronic TV Guide. Local community produced programming on such topics as the arts, government, and ethnic issues will be enhanced by the viewers

who dialog with the program's host, or even become the hosts of the program themselves. Public television may just get a little more public as the program's producers get immediate feedback from the viewers. And hey, by the way, wouldn't you like to co-host a movie review program once a month?

FirstClass servers at each state will replicate discussion areas and resources by way of a shared satellite-based TCP/IP network. PBS stations across the nation will also take advantage of these connections for private, internal communications. Steven Asbury, president of SoftArc states that "... an unprecedented variety of 'users'- each having individual ideas about ways to improve public television... [will provide] feedback from this new collaborative programming ...[and] can help public television be immediately responsive to the viewing public."

Neighborhood involvement is a key factor in distinguishing PBS ONLINE from other national online networks. The basic public television programming model is a strong core of programs based on national content, enhanced with local flavor programs; soon regional stations will have the ability to offer a composite online service with community-specific information.

I suspect the existing PBS Learning Link, which has a target audience of K-12 education and currently reaches 37,000 users by way of 22 public television stations, will fall by the wayside. PBS Learning Link endeavors to meet the needs of teachers, students, parents, and childcare providers by offering easy access to program guides, lesson plans, resource sharing and discussion conferences primarily linked to PBS programs. Users of this service will, it is likely, say "good-bye" to it in the same breath as they say "hello" to PBS ONLINE.

PBS ONLINE is developing an online network tied to PTV - The Ready to Learn Service on PBS. Designed as a meeting place for parents, teachers, and childcare providers - together these two services will allow program hosts such as Fred Rogers of "Mr. Rogers' Neighborhood" to interact with his viewers.

MATHLINE, ADULT LEARNING SERVICE ONLINE, and PRIME TIME ONLINE are shows that are under development. According to Bob Ottenhoff, executive vice president and chief operating officer at PBS, PBS ONLINE "will play an important role in expanding and diversifying the public television 'neighborhood.' SoftArc's First Class is going to help PBS and public television stations reach audiences in innovative and exciting

ways and in doing so further our mission to educate, entertain and inspire."

Friends, I see one kinghell of a fundraiser on the horizon. PBS is a private, non-profit corporation serving 346 public television stations in every U.S. state, Puerto Rico, the Virgin Islands, Guam and American Samoa. I have to ask will the one million licenses be enough? I am looking for the dollar signs in this PBS/SoftArc deal and yet I haven't heard a word about how much money this particular nonprofit corporation is going to have to find to pay the freight.

FirstClass is a cross-platform, enterprise-wide group communication system that integrates state-of-the-art e-mail with group conferencing, access to existing corporate databases, forms processing, real-time discussions and online communications functions. And dollarwise, it can't be cheap.

FirstClass offers either performance over network or modem and operates in Macintosh, Windows and terminal emulation environments. The product is available in 12 different languages and is used by businesses, educational institutions, governments and private individuals in more than 30 countries worldwide. SoftArc claims to have an installed user base of over 2 million mailboxes. It sounds like PBS picked the right vendor to handle the task of helping it go online.

If you want to speak to SoftArc send an e-mail message to sales@softarc.com or call (voice) 905-415-7000 or call (fax) 905-415-7070. All inquiries are handled by staff under the direction of Dallas Kachan, Manager Sales and Marketing, SoftArc Inc.

CLASSROOM CONNECT: MAKING THE INTERNET WORK FOR TEACHERS AND THEIR STUDENTS

A teachers and students magazine for navigating the Internet appeared two months ago. Classroom Connect (CC) "is a hands-on tool and advocate for the teacher who wants to get online as effectively as possible," states Chris Noonan Strum, editor. Finding grant money, getting connected, understanding "the sometimes arcane Net language" will be dealt with in every issue, promises Strum. Lesson plans, classroom resources, keypals, and online projects are all editorial departments for the magazine.

In the 16-page premier issue, these departments offered such basic and necessary items such as a directory of places on the Internet where teachers can find curriculum ideas, a first-person teacher story of how the Internet helps them and their students, a listing of technology grants, and an explanation of what a new user must know to enjoy his/her first connection on the Internet.

On the tech side, CC presents columns on companies that offer teachers free Internet access and free support, introduction to the graphical interface Mosaic, an evaluation of commercial online services as an educational resource, and a basic how-to feature on turning your school into an Internet site by new "plug and play" systems.

You might balk at the \$39 year subscription or two subscriptions (not two years) for \$67; you might say to yourself, "Nine issues of 16 pages each for nearly forty dollars seems kind of steep to me." But, colleagues in the classroom, this is no Weekly Reader or Scholastic Magazine!! As hard as I tried, I could find no fluff or frills in this magazine; every

article was purposeful, concise, and clear. CC doesn't speak down to students or teachers. This magazine may have several uses that mediate its \$4.35 cost per issue.

First, it will be a valuable aid convincing reluctant colleagues and administrators of the ease-of-use of the Internet in the classroom. Honest considerations of money, an issue which can be disheartening to public and private school teachers, are dealt with from the perspectives of funding possibilities and cost/quality limits.

A second value of CC is that in the hands of students, it is likely that they will become knowledgeable, interested, and less reluctant in their use of the Internet. I recognize the immediate value of this magazine to those teachers who frequently use the cooperative group model for a portion of their instruction methods. This may well be the ideal tool with which students can teach students.

Thirdly, if you are the defacto expert in your school because of your enthusiasm for the Internet, CC is probably among the best one-stop sources for current information that can be readily used in teacher in-services and parent interest groups. You may stop worrying about getting caught up on your Internet reading or just finding sources with which to put together lessons.

You access more Classroom Connect information through the AdvantageFax Internet Information Center from your fax phone: 717-393-2565, or your voice phone: 800-638-1639, or e-mail to: hvnb@wentworth.com or e-mail to: info@wentworth.com You may ftp to: <ftp://ftp.wentworth.com> go to the other-pub/wentworth subdirectory URL:

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If you would like to e-mail the editor, beg for a complimentary issue, or to offer article submission ideas, the address is: editor@wentworth.com. If you trust my enthusiasm about Connect Classroom and wish to subscribe, e-mail Amy Young at connect@wentworth.com. The magazine receives fat mail at Wentworth Worldwide Media, 1866 Colonial Village Lane, P.O. Box 10488, Lancaster, PA 17605-0488.

CONNECTING YOUNG AUTHORS

Young Authors is the name of a new electronic journal which hopes to publish works by worldwide authors in middle, junior high, and high school; the age range of the authors is 11 years to 18 years. The editors of Young Authors are seeking original works in any genre or form; there are no type or space limitations.

The editors will work with authors whose work receives a favorable review but may need some revision before publication. Cash awards are given to the top three works published in each journal issue. This first issue will have the following cash prizes: best manuscript, \$50, second place, \$30, third place, \$20.

All published authors, and their school library, will receive a hard copy of the journal issue. The electronic version will be widely distributed on the Internet. The editors plan to publish five times per year; however, final decisions will be determined by the response to each call for manuscripts. Submissions assume the author's permission to publish.

The submission deadline is March 31, 1995 for the April 30, 1995 issue. If this deadline is missed, the editor requests that authors submit anyway. If it is too late for the next issue, your manuscript will be considered for the following issue. Future deadlines are: July 31 and November 30. The number of issues will be increased as quality submissions become available.

The journal itself will not be copyrighted; all submissions must be accompanied by the following information: Author's name, address, phone number, the author's school's name, address, and phone number.

E-mail submissions to: JMM12@psuvm.psu.edu or fax to: Jamie Myers at (USA) 814-863-7602. Fat mail the editor at: Jamie Myers, 260 Chambers, Penn State University, University Park, PA, 16802, USA.

HOLD THAT (ELECTRONIC) SNAKE: NATIONAL BIOLOGY TEACHERS NETWORK

Many biology teachers, polled by a Roper Organization survey, complain of an "isolation barrier"; the survey of more than 500 biology teachers shows that restricted school budgets and the teachers' heavy work loads have prevented many from keeping up with scientific advances.

In response to this information, Genentech, Inc. has selected America Online to provide a nationwide interactive computer network for high school biology teachers. Genentech, Inc. promises to invest \$10 million in the network. Through America Online, Genentech hopes that teachers will be able to reach peers, experts and university resources that have been out of reach in the past.

Each year the National Science Teachers Association will select 100 among the nation's 50,000 biology teachers to be core participants in the network. They will receive a laptop computer, a free six-month subscription to America Online and special training on the network.

The network will also be available to anyone else with access to a computer, a modem and a subscription to America Online, which appears to be one among several of the nation's fastest-growing providers of education online services. G. Kirk Raab, president and chief executive officer of Genentech, said that

the teachers electronic network would be the best vehicle through which the company could give something back to America.

Contact America Online at 800-827-6364 for updates and schedules as to when the National Biology Teachers Network will come online. Application for the training are available through the National Science Teachers Association, which has its headquarters in Washington, D.C.

AND WHILE WE ARE ON THE TOPIC OF SCIENCE EDUCATION: ARE YOU LOOKING FOR SOURCES OF LESSON PLANS?

Science teachers should investigate Community of Explorers Lesson Plans database; it has hundreds of kindergarten through twelve lesson plans in biology, earth science, math, physical science, chemistry and physics lesson plans. Spanish lesson plans are available here also. Gopher to copernicus.bbn.com; look in NATIONAL SCHOOL NETWORK TESTBED, COMMUNITY OF EXPLORERS LESSON PLANS, AND UCSD INTERNET LESSON PLANS.

For galactic space lesson plans, peruse NASA's SpaceLink database. Accessible on the Internet (free) and through a dial-in modem (costly long distance phone charges), SpaceLink updates its information daily and gives latest news on the space shuttle missions, current research, and more. Call via modem: 205-895-0028 or telnet to: spacelink.msfc.nasa.gov, login **newuser**, password **newuser**.

If your science lessons focus on soil erosion, water pollution or archaeological digs for dinosaurs, you owe it to yourself to visit electronically the Educational Resources Information Center (ERIC), a nationwide information network funded by the U.S. Department of Education. Dissertations, journal articles, lesson plans, curriculum guidelines and much, much more are available. The lesson plan database is searched by menu or keyword. Gopher to erlcr.syr.edu, look in lesson plans, URL: <http://erlyx.syr.edu>



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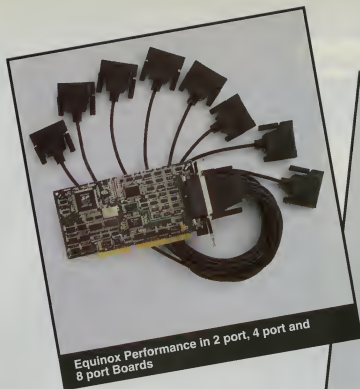
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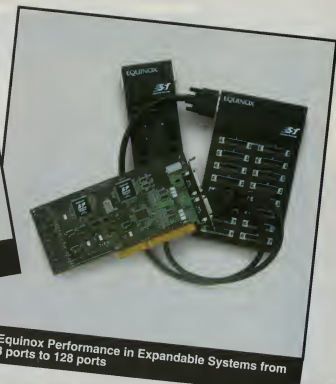
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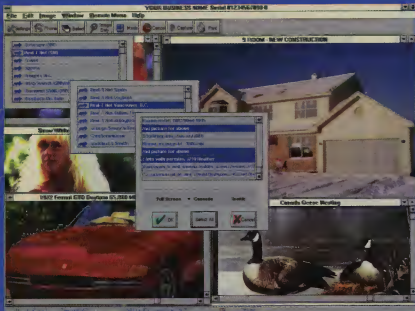
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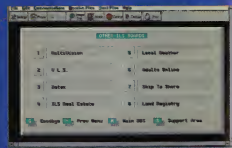
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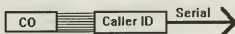
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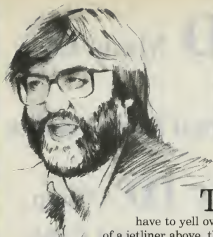
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LEGALLY ONLINE by Lance Rose

NOISE AND THE PUBLIC NET

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The public net will soon be neck deep in noise. Noise you'll have to yell over to be heard, like the thunder of a jetliner above, the crunch and grind of a cement truck on the road nearby, the roar of a subway train across the platform. Like the noise that fogs your mind as you move through large crowds, that makes you flee madly from a busy factory the moment your business there ends. Noise and the need to escape from noise will drive development of the public net. Forget "infrastructure," forget "superhighways," all that hack political vaporware. Feel the noise: buzzing static, fitful low rumbles, the clamor of excited mobs.

A moment for definitions. What is the "public net?" Something not yet generally defined, but we'll gladly take a stab here. It actually refers to two different kinds of shared public spaces. First, the *public transmission space*: all the wires, switches, transmitters and software that make up our shared communications environment, and define the total bandwidth available to the public for communications. Second, the *public social space*: the sum total of online places where people can publicly mingle, meet, discuss and socialize. The major meeting places today include thousands of unmoderated newsgroups on Usenet; thousands of mailing lists that can be joined for the asking; and MUDs and MOOs that are open to the public. This is the public net — the shared, non-private communications environment. We are listening here mainly to the public social space, though who can ignore completely the dull roar soaking up bandwidth in the public transmission space??

Where is the noise coming from? Start with those who have the cheapest access to the Internet. College students and others with freebie Internet accounts, through public libraries and the like, are a fairly noisy bunch. Slackers with nothing but time on their hands, who can't even afford a Prodigy subscription, will account for loads of meaningless noise as they hang out on virtual street corners. We don't have to insist that *everyone* with cheap access will clog up public bandwidth to recognize that a goodly proportion will. There's a core contingent online that will *insist* on the right to expound endlessly on the fatuous, and lament the passing of the old days when the Internet was paid by tax dollars and ruled by free riders.

Then make way for the advertisers, promoters and scam artists. Oops, mentioned them all in the same breath — capitalistically incorrect! They are leading

their troops and drones into cyberspace behind goofy muses Lawrence Canter and Marcia Siegel, the lawyers who proved any publicity is great for online business, even when the headline says you're an idiot. Based on Canter & Siegel's clueless example, many marketers now believe that spamming and bombing runs across the public net are a savvy way of advertising to a vast sea of junk e-mail victims. Expect all popular public discussions to be punctuated with frequent commercial messages — noise, noise, noise.

Which brings us to the group that recently set itself up as some sort of Internet Cleanliness Tribunal, who announced they will cancel out any message broadcast to large groups of net users who couldn't care less about it. Nice thought, but when they actually try to cancel such a message, we could witness an instant escalation that would put last decade's Star Wars scenarios to shame. The original annoying message sender could use the cancellation attempt as a cue to send out twice as many copies of the same annoying message, and if those are cancelled, twice as many again. The whole net could go down in warfare between good samaritan message cancellers and those who will self-righteously demonstrate that no one controls the public net nor their complete power to pollute it.

The real noise starts up when we look at the stars of tomorrow's net — software agents. These dudes are getting a lot of play in the press right now due to the recent introduction of the first Telescript devices with programmable e-mail. They are the little helpers who will add that extra touch of convenience to our lives. They will gather up fronds of fresh news for our personalized morning papers, and negotiate airline reservations and schedule changes so we don't miss a step in our air travels.

Nice image, but the net has many more, and far dirtier jobs in store for software agents. For example, copyright owners, including every entertainment and publishing company enormous or small, will deploy agents to seek out infringing copies of their property wherever it resides on the net. Marketers of every stripe will have agents on the net as their eyes, ears and fashion calipers, monitoring online pop culture continuously. Cops will welcome the multiplication of their efforts by software agents, using them lavishly to even the odds against hackers careening through cyberspace, drug dealers, and of course their self-declared main target, online pedophiles. Look particularly for the IRS to use agents to scour the net thoroughly,

picking up every shred of evidence that can later be used to confirm or deny the statements made on tax filings.

Don't forget parents. There's a growing hysteria that kids can go to naughty places on the net, where parents cannot filter their experiences. Software agents are the perfect answer for worried parents seeking to avoid continuous confrontations with their kids. Just set up the agents so they will report back on all the kids' activities online, and perhaps ring some real loud alarms if the kid is caught going to a no-no place.

All these groups and many others will be able to deploy thousands of agents apiece and keep them steadily working the beat, reporting back their findings whenever they see something interesting. Just think — thousands, maybe millions of people and businesses, each deploying hundreds, maybe thousands of agents. That works out to millions or billions of agents, each one active on the net 24 hours per day (unlike humans, those wimps, confined by their limited biology to waking hours). Some heady, serious noise there . . .

How will we deal with all that noise? Many people just won't involve themselves in the public net at all. They will stay away from Usenet, and stay away from new models of shared public discussions that will follow Usenet, such as large-scale public MUDs. They'll sail through cyberspace in little capsules with hard encryption-generated shells, like they were driving through a dangerous neighborhood with the car windows rolled up.

Others will dive into the mayhem of the public space, reveling in the action and unpredictability. There will be "street" social structures, "street" art and "street" business on the net. The business opportunities on a wild public net are probably enormous, though impossible to predict right now. What will be the killer business of the public net? How about online tattoo parlors, where skilled artists will add beautiful images or features to the icon or three-dimensional image you present to others as you travel through the net?

Don't look now, but here comes a new rationale for heavy government regulation of the public net: keeping public bandwidth wide and usable amidst all the net-noise to come. Actually, it's the same old rationale that gave rise to the Federal Communications Commission in the 1930s, when it was claimed band-

width allocation by the government was necessary to keep broadcasters from cancelling each other out on the same radio frequencies. For a while it has looked like bandwidth scarcity (and the FCC) will finally go away, as modern multiplexing, fibers, packets, satellites, multiple wires to the home and all the rest multiply our electronic delivery capabilities enormously. However, the noise levels on the net could swell at a greater rate than bandwidth, as growing mobs of net users and their many agents take up bandwidth slack by learning to make noise in multimedia, at increasingly high resolutions. If so, expect to see the FCC rush in to protect and allocate public "netwidth," so net businesses and communities can function in the clear. The only thing that will prevent the FCC from rising like a Red Tape Phoenix in the highly noisy net scenario will be voluntary cooperation among net users and businesses to keep the noise levels down. Is this likely to happen as long as there are loudmouths like Canter and Siegel, who insist on squawking all over cyberspace until they're shut down?



Where will people go if we have a public net that's too noisy, or too regulated, or both at the same time? Private online services, that's where. You pay your money, and you get your low netnoise floor that permits quiet, contemplative discussions among the intelligentsia. What kinds of services? The ones you already know, of course: Prodigy, CompuServe, and America Online, as well as the smaller services and tens of thousands of computer bulletin boards. Today's dial-up services are successful precisely because of their well-moderated, low noise public discussions. They will readily attract noise-weary net users like bees to honey, once they become readily available by telnet. Small computer bulletin boards, the

survivors in small markets sustained only by local dial-up customers, will likewise overwhelm the Internet with their hard-won skills in providing online meeting places. The celebrated web servers don't figure big here, since the World Wide Web today is principally a publishing platform for multimedia magazines. Web servers may add features to support online communities in the future, and come to be a valuable part of online community. At that point they will no longer be web servers as we know them today, but a kind of bulletin board software system.

We should also see more public spaces reappearing *within* private service areas, such as community-based bulletin boards, in order to keep the noise down in public meetings and discussions. The public will be private, in order to function at all. Act up in such a place and you'll be tossed out on your virtual ear. These spaces will be able to support themselves by charging fees to users under the same rationale that supports charging public parking fees and usage fees for public beaches in the physical world. In these new public/private spaces, we will see land-based local, regional and national civic groups going online, as well as brand new civic and government groups entirely indigenous to the net.

Finally, and most impressively (or least, depending on your point of view), the noise on the net could lead to reinstituting the vanishing, traditional Internet culture. Researchers, professors and college kids are being driven off the Internet proper as it switches over to mass market use, filled with shouting software agents wearing sandwich boards and couch potatoes rolling in by the bushel from the ubiquitous Internet "on-ramps" available now at every K-Mart and Price Club. These academic renegades, like everyone else, will find their own refuge in private, moderated online services. Once they congregate on such systems, what's to stop them from enacting new "acceptable use policies," banning all commercial uses? These people can recapture the Internet as they knew it in the past, a legendary place where commerciality and the rules of the outside world did not apply, and which no one in the outside world really cared about. Except that now, instead of comprising the whole of the net, it will be just another world connected to the noisy public net.

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MACINTOSH NEWS

by Bill Gram-Reefer

BE RESOLVED

This is one New Years' resolution you shouldn't forgo. Hold up your right hand, place your left hand on a Bible or some other revelatory document of your choice, and repeat after me:

"Understanding that it might already be taken or some schmuck in Livermore might get it first, I, <sysop's name>, due solemnly swear, that I will immediately register <your BBS name>, my bulletin board system that I hope to one day have hanging off the Internet, with the NIC Internet Registry as soon as possible, by contacting the host-master at my Internet service provider and filling out and sending back in the necessary form. In the event that I have no Internet service provider I will get an account and then apply for said name or figure out how to do same with some other agency that can supply Internet domain name service.

"Failing this, I shall not grumble or whine when I, <sysop's name>, have to change the name of <your BBS name>, my bulletin board system, because some schmuck in Livermore already owns it."

Sign and date here: _____

BATTER UP

I can't think of a better way to ring in the New Year but to cover my first bit of vaporware for 1995. Behold the arrival of Pancake (v.0.48—released in October), a shareware version of MV Systems' BBS for Macintosh that features support for serial and TCP/IP connections. Over the Internet, callers can telnet in/out as well as finger in/out.

Available as shareware in a 2 port/2 node version that allows one local port for sysop use and one port for a TCP/IP or serial connection. This peekware allows two users on at a time. More powerful, commercial versions (more ports or nodes) are promised (pricing unknown).

At deadline, the current version of Pancake was still in beta testing, but functioning. It's still lacking ADSP file areas, etc., but MV Systems wanted to get the product known, hopefully to encourage the development of third party products, and give the company some time to iron out the beta bugs.

Just poured out on the griddle of telecommunications software competition, Pancake already touts local and Usenet groups with true RFC compliance for long subject lines, and pays homage to Macintosh

sysops' love/hate relationship with FidoNet by supporting Tabby's Generic import file structure and the ability to let Parse News (news tosser/importer) run in the background. Sources claim additional goodies such as needing only 320K for 2-3 nodes, and that the Pancake host can launch any selected terminal package for outbound use, and will actually take the port back when that outgoing session is done to wait for incoming calls.

The possibilities boggle as a Speech Manager assisted, sysop selectable response to a user's chat request will let you create your very "Get lost, I'm busy," oops, excuse me, "The Sysop is unavailable for Chat at this time" response, while a full screen (via local sysop node) provides complete editing functions including cut-paste-copy functions. Other administrative features let sysops define what should actually go into a variety of logs.

Although this early version does not yet support file sections, it does offer a hotkey shell and WAFFLE-style command-line interface and built-in help. Promises for future versions of Pancake (unclear whether available as commercial or shareware) include file sections, full-screen editor, AppleTalk ADSP support, and, of course, a graphical user interface.

Send fan mail and "I WISH" mail to ferrari@netaxs.com or telnet direct to: slip-55.netaxs.com or alamut.st.hmc.edu.

A ONE WAY STREET

If you don't want to mess with BBS administration, passwords, settings files and conference sections, but still need a simple and secure way to receive or send files over dial-up lines and networks, then take a look at ASAP from Fast Lane, Inc.

Basically what you get is a client/server like most modern Mac BBS systems. The "Receiver" sits on the host machine and is configured to operate with a modem attached to a port that is waiting for a call. The "Sender" can be freely copied and given to clients, customers, or friends. The Sender is easily installed and simply configured with minimal headache. All senders need to do is enter the phone number of the receiver, plus their own name and address. When a sender wants to transmit a file to the receiver they simply drag the document to the send icon and a window opens showing the file name, type and creator. The sender is able to type in any special instructions in a notes area then hit the

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send button whereupon ASAP compresses the file, stimulates the modem, dials the numero and transfers the file. Verification of file transfer is reported and you're done. With a host computer running a properly configured Receiver set to accept calls, a RING is detected and answered resulting in the download of the file from the sender. Each session is summarized in its own folder showing file name, notes, etc. That's it. Because it works with the Communications Toolbox, ASAP connections can be made over virtually any kind of network transport supported by a CTB tool, including AppleTalk via an ADSP tool, or TCR/ISDN, and others.

The upshot and potential benefit is there are no passwords or IDs for senders or hosts to remember, while hosts are virtually secure from intruders and hackers; in fact, once a user clicks the send button, they have no access to the Receiver system at all, which has some merit. Senders only press one button to install the free software and they're ready to send you work. ASAP claims advanced error correction techniques that guarantee 100 percent accurate transmissions and state-of-the-art file compression, using Aladdin technology along with some built-in Applets to automatically compress and decompress files on transmission and reception.

There are two obvious drawbacks to ASAP. Although it works as advertised, for what it does its \$695 retail price is a sucker punch to the nose compared against pricing for entry-level systems from other Mac BBS vendors. Secondly, if there's one thing that's being pounded into our heads about computers and telecommunications it's INTERACTIVITY is the value add. So why would people want a program with: no chat to see if the previous job is done or get details about final-final deadlines during the upload session; no mail for the host to inquire about unclear instructions; no downloads for customers that might want to see a thumbnail low-res proof; no file areas where users can access the latest system and graphic applications updates; no conference areas to see what nifty things other business types are discovering. Yet, despite these shortcomings a wide variety of companies are using ASAP's base-level BBS subset features both for internal use, doctors sending slides to a central processing center within a hospital, for instance, or in servicing remote users

in newspaper, sales, and pre-press and quick-copy environments.

There are alternatives to ASAP's solution, especially in the pre-press arena. On the mini side, one could download a free shareware copy of Spider Island's TeleFinder Pro and use it in Remote Access Host mode where, admittedly, callers have to remember a password, but not only are able to upload files via Z-Modem, but can access files in a public folder designated by the host, send mail, plus chat. On the vertical-market highend, service bureaus looking for job-ticket documentation and two-way transfers can take advantage of a variety of solutions from TeleFinder and its efficient freeware Take Your Order program, to Pine Island's robust \$495 Beehive Messaging System extension set bundled with a FirstClass BBS 20-user license. The savings will provide more capability and pay for the modem!

It is no secret that printers, service bureaus and quick copy



centers are increasingly turning to BBS technology. Not just a toy of the propeller heads user groups or artsy service bureaus in Los Angeles anymore, why even managers at big-time companies are adding Mac-based BBS technology to augment and replace existing systems. For instance, while Sir Speedy has standardized on TeleFinder, other leading mass-market service organizations (like PBS' selection of FirstClass) are trying hard not to stiff their clients with ultra-limited capabilities, by giving them more tools to use (increase sales) and more ways to communicate; not less (increase profits).

All security and ease-of-use issues being arguably equal, it seems at \$695, ASAP is an expensive investment for just file transfer capability. Certainly ease-of-use is a key, and there will be arguments about which is easier to

use, but you just don't need to be a rocket scientist to figure out how to work the client (or host) software from FirstClass, TeleFinder, or NovaLink Professional. While ASAP requires no passwords or user manager files a potential security problem in itself allowing for unauthorized sending users of client software from other Mac BBS programs only need enter their password one, and since both ASAP and BBS clients require the setup of modem, port, and phone number anyway, this is not the barrier it's made out to be. Additionally, Mac BBSs, like TeleFinder and NovaLink are scriptable providing for batching, queuing, scheduling, drag-and-drop functionality including automatic compression and decompression.

ASAP works well for what it does: transfer files. Very simple, somewhat secure, and limited OK, call it focused. Because corporate traffic control, like cities, sometimes require restrictions on the flow of specialized traffic, ASAP does have its niche and will work well in highly defined situations where central facilities could receive and process done-deal, no-questions-about-it print, sales, or shipping orders. But, I just can't imagine how a serious service bureau could get away with calling itself a heads-up technology company and then offer its clientele such limited one-way capabilities, especially when VARs and companies in the pre-press and quick-print/copy business are headed in the direction of offering more, more, more, more, more.

Fast Lane, Inc., 7600 Bryan Dairy Road, Largo FL 34647; (813)547-8989 voice; (813)547-8988 fax; TryASAP America Online. Spider Island Software, 4790 Irvine Boulevard, Suite 105-347, Irvine, CA 92720; (714)669-9260 voice; (714)669-1383 fax; (714) 730-5785 BBS dial-up; spiderisland.com Internet. Pine Island Software, 6144 Hillside Avenue, Suite 7, Indianapolis, IN 46220; (317)465-9623 voice; (317) 255-4313 fax; (317)466-7970 BBS dial-up. SoftArc Inc. 100 Allstate Parkway, Markham, Ontario Canada L3R-6H3; (905)415-7000 voice; (905)415-7151; (905)415-7070 BBS dial-up; sales@softarc.com Internet. ResNova Software, 504 Argosy, Suite 13, Huntington Beach, CA 92649; (714)379-9000 voice; (714)379-9004 BBS dial-up; resnova.com Internet. ♦

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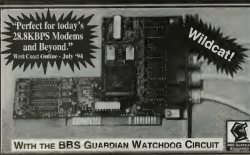
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- Flexible addressing and interrupt structure
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- Data rates up to 460,800 BPS

BBS550™

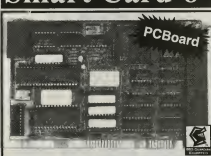


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- Digilab PC's emulation mode.
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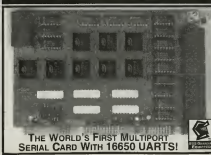


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BlackBoard-8™

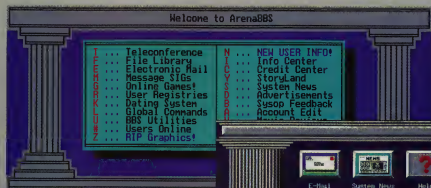


- 8 Ports with 16550 UARTS
- IRQ's may be shared or each port may have a separate IRQ assigned to it.
- BBS Guardian Watchdog Circuit resets the computer if the system crashes.
- Flexible addressing and interrupt structure.
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- Data rates up to 460,800 Bits per second.

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Graphical user interfaces have been available on many different computer systems for years. But until now, you haven't been able to get a bulletin board system with a GUI unless you used a proprietary solution. Until now. RIPscrip (Remote Imaging Protocol script language) is a published specification developed by TeleGrafix supported by over twenty-five leading vendors on the PC, Macintosh, and Unix platforms. Any on-line system that can display a text menu can use RIPscrip. Chances are that your favorite BBS has RIPscrip support built in.

RIPdraw™

RIPdraw is the entry level RIPscrip graphics creation package. Designed for recreational system operators and the telecommunicator, RIPdraw is perfect for creation of stunning on-line graphics at a low price - \$29. • Special - \$35 •

RIPaint™

RIPaint is a graphical drawing environment designed for creating menus and screens to supplement or replace a host's existing menus. Integrated tools for creation of clickable buttons, creation and use of bitmap icons, and optimization of files makes this a powerful tool for creating a graphical user interface for your system at an affordable price - \$200.

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DELPHI by Walt Howe

DELPHI CUSTOM FORUMS TOP 400

Walt Howe is the Internet Special Interest Group Manager on DELPHI. He has syssped for several BBSs including the old Source network, CompuServe, and Delphi. Over the last four years he co-authored with Steve Lambert *Internet Basics, Your Online Access to the Global Electronic Superhighway*, available in most bookstores. Walt has also written a number of user manuals for various computer companies, including Delphi. Walt can be reached by e-mail at walthowe.delphi.com. A five hour free Delphi membership is available by dialing 800-695-4002 by modem and using the password

Want to create your own Custom Forum with its own gopher and World Wide Web browser? 400 other people have on DELPHI. The fastest growing area on DELPHI is the Custom Forums, where the number of forums has recently topped 400, most of them created during 1994. If you are a DELPHI member in good standing, you can start and operate your own Custom Forum with your own custom access to Internet resources. Building your own Forum with help from the DELPHI staff is a great way to learn your way around the nets and to share your own expertise with others.

For an initial \$29.95 setup fee and \$5 a month, you can create your own Forum. The Forum can be devoted to just about any topic or theme you are interested in. You can set up your own message base, database, and Internet e-mail access, but above all, you can set up your own Internet gopher and World Wide Web browser in DELPHI's Navigator system. You can also set up your own Usenet newsgroup reader with your own custom selection of the 5000 or so newsgroups that DELPHI makes available.

The Internet Navigator system lets you address World Wide Web sites, gopher sites, telnet sites, ftp sites, libraries, games, databases, and search utilities from all over the world. You research and set up the pointers to the resources around the world with training and assistance from the DELPHI staff and other Custom Hosts. Done well, you can set up a unique Internet resource that will attract others to use your Forum and possibly even make you money.

Others who use your Forum are not limited to the Internet and Web pointers and newsgroups you set up, but they can create their own Personal Favorites menus that appear on the Navigator and Usenet menus, wherever they are in DELPHI. This gives people the chance to use the expertise you have developed, but to follow their own interests while they are in your area, too. In fact, some people have developed such interesting Personal Favorites menus on their interests during net surfing that they have turned them into their own Custom Forum menus. You can follow this exploratory route for a while, if

you are not sure you are ready to tackle a Custom Forum yourself.

You decide whether your Custom Forum will be open to all DELPHI members, open to only those who apply for access, or open to only those you choose to allow access. If your Custom Forum is for a special interest, you may want anyone on DELPHI to have access. If it is for a national organization, you may wish to require that potential members apply for access to qualify them for membership. If it is meant as a gathering place for family members or members of your business only, you can choose to give access to them only. You'll also have access to a "lock out" feature if individual members become disruptive.

You can divide your message into as many as 16 "topics" which help to organize the forum. Topics can also be used to establish multiple levels of access to information in the forum. As the Host, you can determine which topics will be opened or closed, and assign members' access to closed topics as you wish.

As the Host, you have the ability to edit or delete forum messages which are either inappropriate, outdated or incorrect. Some hosts choose to keep strict editorial control on their Forums. Most, however, let the discussions range freely around their topics. Censorship is always a sensitive issue.

You can spruce up your Custom Forum with banners throughout the menus. Main banners are a great place to announce important news and special upcoming events. Conference banners can remind your members of regularly scheduled conferences or meeting times. Forum banners might be used to point members to message "threads" of significant interest to members, or to remind members how to use search tools to find information in your message base. The one-time setup fee of \$29.95 and the monthly maintenance fee of \$5 are billed to one person only — the Host. All those who use the forum simply pay DELPHI's standard membership and connect fees.

Any Host can earn money through DELPHI's referral program. For an additional \$20, DELPHI will create a unique sign-up code for the Host to



Upgrading Your Modem...



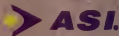
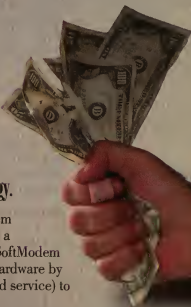
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promote to potential DELPHI members. For each new member who joins as a result of the Host's promotional effort and remains a member for at least 30 days, the Host will receive a **\$10.00** credit on the following month's statement. The Host will be able to see a list of members for whom he or she was given credit on each month's statement.

DELPHI tracks the usage of all Custom Forums each month. As usage of a Custom Forum increases, incentives are awarded that can progressively eliminate the **\$5** monthly Forum fee, the **\$20** per month DELPHI membership fee, and the accounting for hours the Host spends in the Forum. Since most Hosts spend much more than the basic 20 hours per month, reaching this level of usage can be well worth while.

Most Forum hosts don't set out with an objective of making money. Only a small percentage reach levels where they get a good return for their time. The rewards for most are in creating something unique and useful for others to enjoy and in the friendships that develop online between those with similar interests.

The Custom Forums are also a training ground for the increasing numbers of paid staff that are needed. If the Custom Forum continues to grow significantly, the Host can apply to expand the forum to a full-featured public special interest group on DELPHI. This includes the addition of a larger database, additional Internet features, a member directory, and customized features as needed. The Host will also be paid a monthly management fee for managing the new Special Interest Group.

Using this path of growth, a forum Host can expand his/her special interest or expertise into a profitable and fun online business!

[The prices and usage figures are subject to change with notice posted online in this area.]

FINDING YOUR WAY AROUND 400 CUSTOM FORUMS

When the Custom Forums passed 100 a year or so ago, DELPHI developed a keyword search utility for people to find Forums they were interested in. As it continued to grow, DELPHI developed a new topical menu basis to give another approach to locating Custom Forums.

The chart that follows shows the current topical areas that the 400 plus Forums are accessed through.

Arts & Crafts
People Business & Commerce
Philosophy & Spiritual
Collectibles & Hobbies
Politics & Opinion
Computing
Professional/Occupational
Disability Support
Reading & Writing
Education
Recovery
Entertainment & Games
Religion
Family
Science Fiction
Fan Clubs
Sports
Food & Beverage
Technology
Health & Fitness
Travel & Regional
House & Home
SEARCH:
All Categories for Custom Forums
Lifestyles
Exit

The largest single topic is the Entertainment & Games topic, which currently has 34 entries, as shown in the next chart.

ENTERTAINMENT & GAMES

Contents

- 1 FORUM 002 - DESOLATE WEYR
- 2 FORUM 019 - NETHER REALMS(TM)
- 3 FORUM 024 - WARGAMING AND MILITARY STRATEGY FORUM
- 4 FORUM 025 - THE DRAGONET
- 5 FORUM 035 - SCADIANS ON DELPHI
- 6 FORUM 036 - COMEDY CLUB ONLINE
- 7 FORUM 044 - GO PLAYERS' FORUM
- 8 FORUM 052 - THE COMICS FORUM
- 9 FORUM 059 - THE CHESS FORUM
- 10 FORUM 066 - NICKEL KNOWLEDGE SIG
- 11 FORUM 081 - THE RPG FORUM
- 12 FORUM 085 - BRIDGE PLAYERS' FORUM
- 13 FORUM 126 - MAGIC THE GATHERING
- 14 FORUM 127 - HOME THEATER FORUM
- 15 FORUM 137 - AUDACITY ALTERNATIVE MUSIC FORUM
- 16 FORUM 163 - VECTOR 001

- 17 FORUM 170 - THE CALL OF THE HIGHLANDS
- 18 FORUM 179 - THE SOAP OPERA FORUM
- 19 FORUM 212 - THE RABBIT HUTCH COMEDY FORUM
- 20 FORUM 213 - THE CEO COMMUNITY
- 21 FORUM 219 - FLIGHT SIMULATOR FORUM
- 22 FORUM 224 - MUSIC FANDOM
- 23 FORUM 225 - GAMBLING AROUND AMERICA
- 24 FORUM 226 - KANSAS CITY THEATRE LOVERS
- 25 FORUM 235 - THE HORROR DISCUSSION GROUP
- 26 FORUM 245 - THE ZODIAC GAZETTE
- 27 FORUM 248 - THE MUSIC & AUDIO CONNECTION
- 28 FORUM 273 - ISLAND OF KESMAI
- 29 FORUM 286 - ELFQUEST HOLT
- 30 FORUM 294 - THE ASYLUM
- 31 FORUM 310 - OUTLAND GAME NETWORK
- 32 FORUM 315 - THE BIG BEAT! ONLINE
- 33 FORUM 319 - ROLE PLAYING GAMES
- 34 FORUM 365 - HAUNTED HOUSE

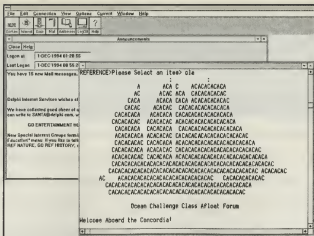
WEEKEND HOURS FOR DELPHI MEMBER SERVICES EXPANDED

DELPHI Member Services has now extended their weekend support hours until 11 pm Eastern time, to offer you more flexibility in getting answers to your questions, when you need them. To reach Member Services call **1-800-695-4005**. The hours are now from 8 am to 11 pm on weekdays and noon to 11 pm on weekends and holidays. DELPHI has greatly increased the Member Services support personnel, and now provides the most responsive customer support among the online services. This has not always been the case, as rapid growth has at times been difficult to keep up with.

ONLINE GAME SUPPORT ON CD ROM OR DISK.

Now, the popular multi-player games — Air Warrior, Harpoon On-line, Stellar Emperor, and Island of Kesmai — are available to you on CD-ROM or diskette. It has never been so easy to play on DELPHI Internet — just plug in and go. No more downloading! Plus, DELPHI has included easy-to-follow instruction booklets and command summary cards to get you started right away.

Air Warrior fans can now experience the thrill of the full graphical version of Air Warrior never before available online. The CD-ROM version of the software package has all the graphics, sound, and excitement that you ever dreamed of for your favorite game. **BONUS** — get the Air Warrior keyboard overlay and have the Air Warrior commands right at your fingertips!



Delphi goes around the world with Class Afloat

To play most of these games, you will need an IBM PC Compatible Computer, with a 386/25 or better, 4 Meg of RAM - 3.5 Meg free, a monitor and video card capable of 640x480 resolution in 256 colors (SVGA), a hard disk with at least 7 Meg free, a 1.2 Meg floppy drive or CD-ROM, a 2400 baud, Hayes compatible modem, and a mouse or joystick.

To order the CD ROM or disks, type or click on GO ELECT and follow the menus. No, it isn't in an election area. DELPHI has renamed its games area as ELECTROPOLIS.

This is the current ELECTROPOLIS menu, with more changes to come:

ELECTROPOLIS (Games) Menu:

ARIES GAMES
OTHER COOL THINGS

Atari Advantage Harpoon
Bridge Room Island of Kesmai
Chat and Chat Games
Stellar Emperor
Chess Room
Feedback on ELECTROPOLIS

MORE GAMES

- Gambling Across America
- Alien
- Game SIG by Scorpia
- Dungeon
- Go Room
- FlipIt
- Modern-to-Modern
- Lunar Lander
- MUD's, MOO's, and Internet Games
- Poker Showdown
- Order the DELPHI Games Kit
- Quest
- Reviews: Games and Software
- Reverse
- Shopping (Computer Express)
- Scramble Word Game
- Trivia Club
- Stellar Conquest
- World of Video Games
- TQ Trivia Tournament
- EXIT

CLASS AFLOAT

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The Concordia is a 188 foot long, three-masted sailing ship. This year, she is taking 51 high school juniors and seniors to sea. At sea, these students will take all their regular high school classes from six full-time teachers, and will receive full academic credit for their studies. As well, they must learn how to sail the ship from the six professional crew aboard. While standing regular watches, they will gradually take over more and more responsibility for running the ship. As this is Class Afloat's 10th anniversary, Concordia is undertaking her mega-voyage, sailing 30,000 miles around the world from Vancouver westbound to Halifax in 300 days.

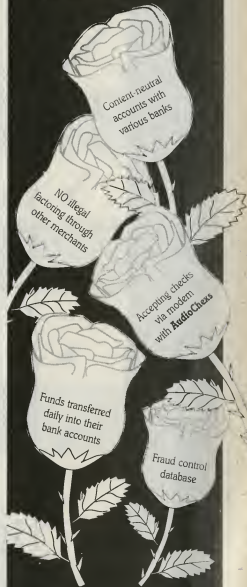
This adventure will be just what people always say that they want to do — take a year off and sail around the world! And we'll be able to do just that, without getting cold and wet and tired, aboard Class Afloat online with DELPHI!

To get to the Class Afloat, type or click on **GO REF CLASS** from anywhere on DELPHI. ♦

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January 1995

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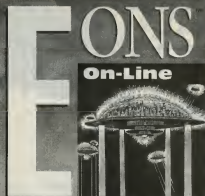
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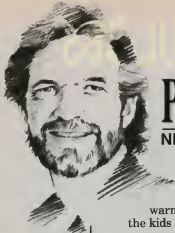
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PRODIGY

by Ric Manning

NEW PRODIGY FOR BUSINESS SHOWS SERVICE'S SERIOUS SIDE

Prodigy at the office? Isn't Prodigy supposed to be the warm and fuzzy online service for Mom and the kids and the family?

Sesame Street and the Babysitters Club are still online, but now so are company profiles from Dun & Bradstreet and a nifty newsclipping service called HeadsUp. The two features are mainstays in Prodigy for Business, a new collection of services that was launched this fall.

Prodigy for Business is designed to appeal to small and home-based business owners, entrepreneurs and traveling sales agents. Prodigy estimates that about 35 percent of its subscribers operate a small business.

D&B Solutions from Dun & Bradstreet delivers brief profiles of thousands of American businesses, including private firms and publicly-traded companies. A typical report lists the company's address, number of employees, SIC code and sales. An abbreviated eight-line Contact report gives you a company's address, phone number and owner's name.

Searches cost a minimum of \$5, even if no records are retrieved, or \$2.50 each for 2-10 reports. The cost of 2-10 Contact reports drops to 60 cents each.

HeadsUp is a quick scan of industry-specific news from a variety of newswires and publications prepared by Individual Inc. Printed sources include The Los Angeles Times, Boston Globe, InfoWorld and Adweek. The wires include AP Online, Newsbytes and the PR Newswire.

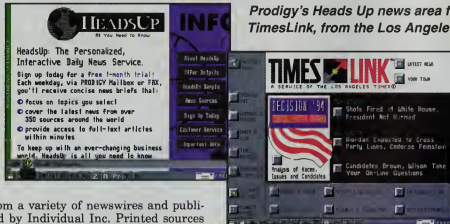
Subscribers choose from a list of about 20 industries they want to follow, such as Autos, Energy, Healthcare or Telecommunications, then narrow the profile further by choosing up to 10 topics. For instance, I chose Information Services, Internet and Ethics and Issues from the Computers & Information Services topic.

Once your profile is entered, HeadsUp prepares a daily briefing consisting of summaries from news stories and wire service reports. The briefings are sent to your Prodigy mailbox each day — or to a designated fax machine or Internet mailbox.

Each summary includes a code for that story. Send an e-mail reply listing that code and Individual will mail or fax you the full text of the story. Subscriptions to HeadsUp cost \$29.95 a month or \$695 a year. The annual subscription includes 160 full-text requests. Other business-oriented features offered through Prodigy for Business include:

- The Small Business Advisor — a daily collection of articles about small business compiled from the Lexis/Nexis databases. Browsing the story headlines is free but retrieving the full text is not.
- The Filing Cabinet — a collection of stock forms and letters created by McGraw Hill and reports on business investments and franchise opportunities.
- Alice Bredin's weekly column about telecommuting and running a home-based business.
- Bulletin boards for entrepreneurs and people who want to start their own business.

Prodigy's Heads Up news area features TimesLink, from the Los Angeles Times

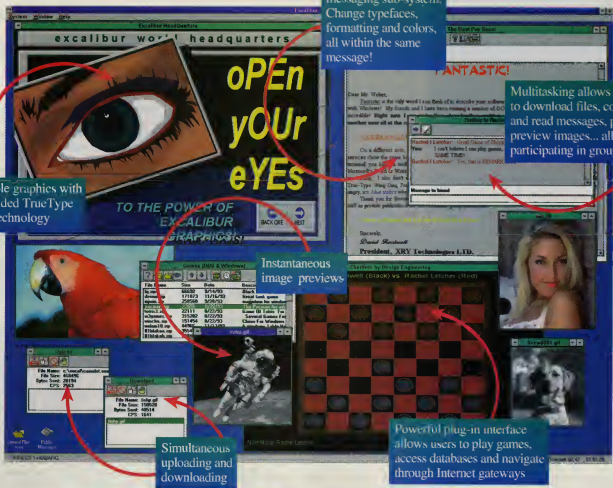


L. A. TIMES, NEWSDAY GO ONLINE

Two of the nation's largest newspapers arrived on Prodigy in October but neither The Los Angeles Times nor Newsday seemed poised to break any new ground.

Both TimesLink and Newsday Direct offer subscribers the usual line-up of current news, sports, business stories and features and a daily photo. With Newsday Direct, you can see a reproduction of the front page — though you can't read much of the print — and TimesLink offers fuzzy scans of three comic strips: Dilbert, Peanuts and Garfield.

Ric Manning writes about computers and technology for *The Courier Journal* in Louisville, KY. His weekly column on consumer electronics is syndicated through the *Gannett News Service*. Ric reads his e-mail at ricman@iglu.com on the Internet, and USJIM92A on Prodigy.



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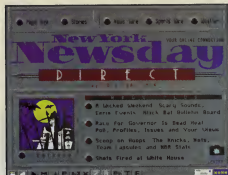
Excalibur is the bulletin board system taking the world by storm. It was the first system of its kind to run entirely under Windows™ and continues to set the standard of measure. Because Excalibur is built around an accelerated bi-directional protocol, users can upload and download files, chat with other users, and compose messages ... *all at the same time!* Utilizing our proprietary graphical interface, users are able to design their own menus and screens incorporating object oriented graphics, bitmapped graphics, and TrueType fonts. This means no two Excalibur based systems are the same! Advanced error correction and data compression offer reliability and

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As for expandability, Excalibur offers true Plug 'N Play abilities. Imagine doors that are both hassle free and easy to use. By using Excalibur's *Application Programming Interface (API)*, third party developers have created everything from Internet gateways and databases to

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Newsday Direct on Prodigy

TimesLink has tailored its service with a strong local flavor. Subscribers can browse a map of Los Angeles-area communities such as Ventura, San Fernando Valley and Orange County. The implication is that readers will get local news from those areas. But when we checkin, the offering was mostly static data such as library hours and the phone number for the sheriff's office.

The tools are in place, however, for more interaction in the future. A Mall Guide section now lists the primary stores in about a dozen metro-area malls, but the service could just as easily be adapted for home shopping and browsing. Similarly, listings for the Department of Motor Vehicles now simply list office hours. Are interactive license renewals on the drawing board?

Newsday Direct has organized its online product to match its two printed publications, one for New York City, the other for Long Island. Subscribers are asked to state their preference when they register for the service.

Newsday already had some depth in its library of stories the first week it was online. Users were able to browse and download almost a full month's worth of articles from each of the paper's sections. The paper promised to keep a one-week backlog online and to provide some material that doesn't appear in the newspaper.

Newsday officials say they are convinced that their online product will make money. Publisher Robert Johnson said he expects Newsday Direct to show a profit within the next few years and one media analyst cited by a Newsday reporter estimated that the companion services could attract 100,000 subscribers and bring in \$6 million a year. Newsday Direct opened for business with five advertisers online, including Saturn dealers.

Like Access Atlanta, TimesLink and Newsday Direct both carry a surcharge of \$4.95 a month for Prodigy members and \$6.95 a month for non-members.

DALLAS PAPER RIDES WITH THE COWBOYS

The Dallas Morning News also joined Prodigy in October. But instead of offering a full-service electronic product, the paper created a service devoted entirely to coverage of the National Football League and the Dallas Cowboys. Officials at the newspaper called the service "a strategic platform" for exploring opportunities in electronic publishing.

The service includes columns by the Cowboys' Hold Trinity: Coach Barry Switzer, former coach Jimmy Johnson and team owner Jerry Jones. But don't expect Johnson to second-guess Switzer. Much of his writing is a scouting report on the team's next opponent.

Subscribers can also look up post-game quotes from players, daily updates, team statistics, and data about other teams in the league. The Dallas Forum BB lets fans (and Dallas haters) swap notes about the team.

WOMEN'S WORK

When Susan Williams DeFife was the leader of an organization for women in state government, she said members of the group were always eager to make connections with women in other groups.

"But there was a problem with resources," DeFife said. "A lot of these non-profit groups didn't have the staff or the money to do it."

After DeFife moved into private business, she helped create the Women's Leadership Connection on Prodigy. "This is the ideal way to bring these groups together in a very low-cost and effective way," she said.

The Women's Leadership Connection is designed to attract women from a broad range of interest groups. Some of the early affiliates are the Financial Women's Association of New York, the Women's Network of the National Conference of State Legislators and the Girl Scouts.

The service features daily summaries of news of interest to women and bulletin boards devoted to topics such as health and starting a business in which members can exchange ideas and opinions. Affiliate groups can also use Prodigy's Chat section for private online conferences.

DeFife said many women are reluctant to go online for fear of being harassed or because they are intimidated by the technology. "They think getting online

will be hard to learn and it will take a long time to learn," she said.

And that's largely why DeFife and her group chose Prodigy. "Prodigy is very easy to learn and easy to use," she said. And the system has a screen for offensive messages and a system to punish offenders.

DeFife said she realizes that the Women's Leadership Connection and its affiliated groups have a sizable sales job to do. In the online world, men far outnumber women and many women are reluctant to try a computer network. But DeFife also points out that she's going after "a huge untapped market."

USENET COMES TO PRODIGY

Prodigy took another step toward increased interaction with the Internet recently by offering subscribers access to Usenet bulletin boards.

Unlike Prodigy Chat and the Prodigy E-mail Connection, Usenet access is built into Prodigy's basic interface. Jump USENET and you're there. Like CompuServe's Usenet reader, the Prodigy front end asks subscribers to choose Usenet groups they want to subscribe to.

You're pre-loaded to get Prodigy-oriented groups, but any others you want you must specify by name or page down through the Usenet list picking off the ones that you want. The latter approach is a serious time-eater. You can only display about 30 group names at a time, so you start to get tired somewhere around alt.chinchilla.

But once you have your group names loaded, Prodigy gives you a news reader that's just as slick as Trumpet News Reader and much better than the interface on CompuServe or America Online.

The reader shows the subject headers for postings under each subject and displays the first few words of each reply, so you can decide if a thread is worth following without calling up each note. The reader also moves quickly from one note to the next and the usual Windows text tools — Copy, Print and Save to file — are always available.

Before Prodigy subscribers can get to the Newsgroups they are encouraged to read a Netiquette section of Usenet "do's and don'ts." There's a parental alert that warns you that some subjects "may contain uncensored adult-oriented material" and a warning that subscribers should not attempt to hide their identity. ♦

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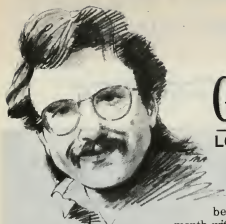
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GENIE by Lenny Bailes

LOOKING INTO GENIE

Lenny Bailes is a PC consultant, writer and teacher living in the San Francisco Bay Area. He is a contributing editor for Microtimes, a California computing magazine, and co-author of Byte's DOS Programmer's Cookbook.

GENIE's Internet Roundtable has been buzzing during the past month with questions about the nature of the "full Internet access" GENIE promises to provide by the end of the year, but so far the only official information available is in a FAQ bulletin. GENIE promises FTP, gopher, outbound telnet, WAIS, and Usenet newsgroups, but so far it looks like this access will take place at 2400 to 9600 bps at GENIE's same \$12.50 to \$18.50 primetime rates, or \$3 to \$6 off-hour charges. Users will not be able to run their own custom mail readers, or other Unix programs, and will be able to gain access to World Wide Web, Archie and Internet Relay Chat only by telnetting into another server and using the software available there. The Internet RT sysops don't have answers, as yet, to other questions concerning the choice of Usenet newsgroups that will be available, and the inclusion of automatic UUencode or MIME-compliant mail readers.

It is now actually possible to access GENIE at 14,400 bps, if you can find an appropriate SprintNet node. From now until the end of December, GENIE is allowing access through SprintNet without imposing additional user surcharges. This means that you can log-on during off-hours for the standard \$3 per hour connect charge, plus an additional \$2 per hour SprintNet fee.

The GENIE Livewire and Windows Lamp magazines this month both feature reviews of some useful Windows shareware utilities. Rosenthal Uninstal can remove unwanted applications from your hard disk and purge references to them in the Windows INI files. WINSLEUTH and WINTUNE are diagnostic and testing utilities that examine your system configuration and make suggestions about how to optimize performance.

The KESMAI company is still adding to its list of interactive online combat games. The newest is Multiplayer Battletech, in which animated tank creatures roam the paramilitary backdrop of a cape and 'crush' 'em planet, looking for things to shoot up and ATM machines to deposit battle-credits. After you've destroyed everything on the original planet, you can hit the starports and inflict yourself on other worlds. Like other KESMAI products, this one uses a VGA graphics front-end that can be downloaded from the KESMAI game page (p.1135).



Doctor Whos found in GENIE's British Isles RT

The November Livewire also informs us that the British Isles RT now features the complete works of Shakespeare and A. Conan Doyle online, as well as a library of color photos of famous landmarks, personalities and maps for Anglophiles. The celebrities library includes portraits of Queen Elizabeth, Winston Churchill, and four different Doctor Whos.



British Isles Roundtable	
	
1760 LANE 710.017	Significant time of England's Lake District
1760 TENDRILL.017	Definitely all GENIE round in London
1760 MALLORY.017	Home of Sir Walter Raleigh
1760 08.017	A single map of the UK and Ireland
1760 GARDEN.017	A round online photograph of Queen Elizabeth
1760 BATTLETECH.017	Classic black-and-white photo of Winston Churchill
1760 01.017	Showing full-face portrait of Princess Diana
1760 0002.017	Graphic image of the 2nd Red Sox, Patrick Thompson

Genies Livewire Magazine featuring British Isles RT

While GENIE's toplevel management continues to ponder the ineffable issues concerned in overhauling the service, the rank-and-file sysops and users carry on their day-to-day message traffic. There's actually quite a bit of interesting and intelligent conversation going on in various roundtables, if you know where to look. GENIE has a specific page called Issues (page 528) that's supposed to point the way to hot-spots on the bulletin board, but it

misses one of the best places to go for a good discussion, the Science Fiction Roundtable (Page 471).

In the last few months, a series of cogent discussions on censorship and "chilling effects in American culture" have sprung up in SFRT. Some of the discussion was spawned

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by the unpleasant event of a public book-burning, in September, on the front steps of the Kansas City Board of Education building. Every year in Kansas City, a group called Project 21 selects three titles to donate to the public school library that include "positive examples" in the treatment of adolescent sexual issues. This year, Caldecott-winner Jane Yolen's *BRIAR ROSE* was one of the titles selected to be donated. *BRIAR ROSE* is a novel about the holocaust in Germany which includes the depiction of a homosexual relationship between two teenagers. A fundamentalist minister protested the donation by staging a public burning of the novel in front of the Board of Education building. According to science fiction author, Robin Bailey, who resides in Kansas City, the event was downplayed in the media and not covered at all in the local newspaper.

Many participants in the SFRT were struck by the chilling irony of a black minister burning a book which seeks to depict the subjugation of human dignity that occurred under the Nazi state of Germany. Yolen, who is the author of more than 100 books for children and also the owner/editor of a small press publishing house, had this to say:

"I try always to be careful about not equating all religious thinkers with 'those' people who burn books. I minored in religion in college and am what the early Quakers called a Seer. Have written three books on religious subjects. That is three of my books are easily identified as religious: FRIEND: The Story of George Fox and the Quakers; SIMPLE GIFTS: The Story of the Shakers; and THE GIFT OF SARAH BARKER, a novel set in a Shaker village.

"Having said that, I must also remind us all that the step from book burning to people burning (the author of those burnable ideas) is not so far. Ask Salman Rushdie. Ask any author sent to the Gulag, the concentration camps etc. Do not tell me it cannot happen here. It can happen here. I do not believe it is a good thing or an honour to have a book burned. I find it scary. And deep down where the black night lurks, there is always the thought that one should/could/must find a less dangerous occupation! Of course for me writing is as breathing and I could no more stop writing—or writing the books I want to — as not take my next breath. But the black thought is still there."

In the SFRT's general topic on Censorship in Science Fiction and Fantasy, another author, Bruce Coville posted a disturbing letter right

around Halloween-time. His book, *GOBLINS IN THE CASTLE*, had been challenged by a parent who protested its use as a class reading text in a Vance County elementary school. Not content to simply have her child read an alternative story (as the teacher involved recommended), the parent did not relent until the book had been removed from the library's public shelves. Coville, who has received thousands of letters from children in praise of his best-selling YA novels, attempted to point out that the occurrence of "goblins" in his story represented a kind of youthful energy: "Because that energy has been suppressed rather than embraced and challenged, the entire country is sterile and in decline." Other responses in the forum pointed out



Virtual Tarot cards, "The Fool" and the "Ace of Wands" found on GEnie's NewAge RT

that 1994 has been the worst year in a decade for challenges to public school libraries, with 42% of them succeeding in removing titles like *A WRINKLE IN TIME*, *BRAVE NEW WORLD*, *DRACULA*, and *GRIMM'S FAIRY TALES*.

Author Jim MacDonald (a former Science Fiction and Fantasy RT sysop) discovered the following letter in the Sunday edition of his local newspaper with a boxed headline: "Halloween is Satan's High Holiday."

Are you taking the children out trick or treating or will you join me in

prayer. God willing, I'll be on my knees Halloween night praying for those innocent children who are celebrating this pagan festival. Halloween is Satan's high holiday, you know. This is the most important day in the satanic calendar year — a festival of death and sacrifice in the spirit world. The roots of this activity date back about 200 years before Christ when the Celts spent the last night of October appeasing Samhain, their god of death and darkness.

The Celts believed that sinful souls of those who died were in a place of torment they called purgatory. Samhain would release those souls if he was pleased with their sacrifices, the Celts reasoned. So gifts of sweets, breads, wine, butchered animals and human sacrifices were prepared as treats. The Celts even dressed up in costume to disguise themselves from Samhain and his demons.

Macdonald, (a practicing Catholic), fired off a reply to the newspaper at the encouragement of other SFRT regulars:

To the Editor:

This letter refers the anonymous letter you published, boxed and with a large headline as if it were important, in the October 23 edition of the Sunday News.

I quite agree with that letter's writer that we must tell our children the truth, but other than the writer's assertion that he or she will spend Halloween night on his or her knees, there isn't a single fact in that letter.

Just for starters, there was no Celtic god named "Samhain."

The doctrine of Purgatory is Catholic.

Halloween is a Christian holiday, dating to the 9th century (about three hundred years after the death of the last Druid).

Jack O' Lanterns are of recent origin.

All of the statements in the letter about the Druids are pure invention.

There's been a great deal of nonsense written about the Druids, including material from the ancient Romans (writing propaganda against an enemy), the 18th century

Welsh nationalists (creating a glorious, and fictitious past), the 20th century neo-Pagans (creating their own equally glorious and equally fictitious past), and now some groups of Christians (who have joined the pagan Romans in writing lurid propaganda against a perceived enemy).

The letter writer is perfectly welcome to spend Halloween night at home in prayer, but he or she would be well advised to spend Halloween day at a library, in research. Personally, I'm going to spend Halloween night taking my kids trick-or-treating.

Sincerely,

James D. MacDonald

And to top it off, Yolen (who is a frequently invited speaker at Library Association conventions and high schools around the country) relates the following anecdote:

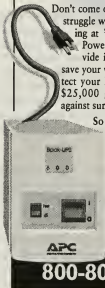
"I received a phone call from a friend, a professor of education who runs a children's literature conference every year. "Do you remember what you were wearing at the conference when you spoke two years ago?" "Jesus, I don't

remember what I was wearing yesterday." "Well, do you ever wear black?" "I have a black pants suit. Oh yes, and a long black skirt and overblouse with white decorations of sun, moon, stars, astrolabes, scientific formulae etc..." "That's it." "That's what?" "We were urging our students to come to this year's conference. One raised her hand and said she'd never attend another of our conferences [because] two years ago one of the speakers had been a witch. I told her we only had children's authors and illustrators speak. She insisted one was a witch because she wore a witch outfit and occult jewelry." "Flunk her," I said. "You don't want her teaching children...oh, never mind. I will turn her into a newt."

In other GENIE RT action, the New Age Roundtable hosted an online "Metaphysical Fair" in November. New Age is cooperating with an Internet Art project in a contest to construct a modern "Virtual Tarot deck." Sponsored by the OTIS project, the goal is to accumulate a complete Tarot deck in electronic form with a diverse sampling of interpretations and styles. The samples floating around this column installment are good exemplars of "angst in the electronic age."

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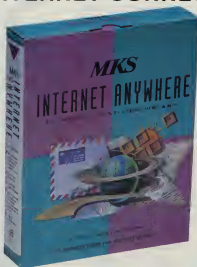
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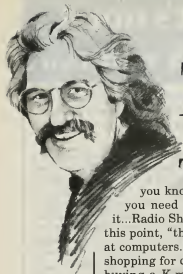
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TELECONFUSION by Charles J. Moore

SHOPPING AT THE SHACK

The other day I found myself in need of some speaker wire and, as you know, there is only one place to go when you need such an "exotic" item, you guessed it...Radio Shack. I know what you're thinking at this point, "this guy is really going in there to look at computers." In this industry (the online world) shopping for computer stuff at "The Shack" is like buying a K-mart tuxedo. Somehow it just don't jive.

So there I was, looking at speaker wire and trying to get out of there before a salesperson could use that special radar that tunes them in on your questioned look. No kidding, I really believe that they have some sort of chip that is placed under the skin at Radio Shack School that sounds an alarm in their head and signals them as to any question that you may have anywhere in your conscious mind. In this case the only question that was looming around in my brain was "how much is this speaker wire?" Well, apparently that was enough to set off the radar alarm because no sooner did I think of it than there he was with that ever predictable nasal voice asking "Do you have any questions?" Let me interject a little something at this point. If you want to have some fun when this happens do what I do, just start asking a bunch of questions that have nothing to do with anything that may be found at any Radio Shack. "Yeah I do, Who invented Jello and why?" or "Where did you get that Tie?," or "Did you know that Flipper was really a dwarf in a fish suit?" You get the idea, be creative, they deserve it.

Well anyway, there he was, a picture of youth and inexperience gone adrift. From the calluses on his thumbs I could tell right away that he was a real game fan and this job was his chance to get paid for indulging in his addiction. Standing at an impressive 5' 5" and wearing the uniform of the day (a white short sleeve shirt with a Looney Tunes tie, solid black pants that had that "Jerry Lewis fit," white socks [hey they match the shirt!]) and those grey "Hush Puppies," you know the ones that have that contrasting black line that goes all around the top of the toe area. Looking sharp! The only other element that needs to be mentioned to complete this mental image is the hair. Picture

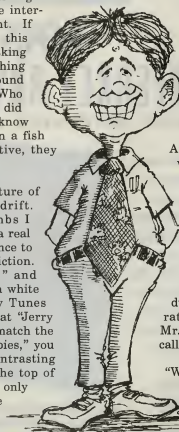
Ricky Ricardo on acid doing his own hair with the window down in a 747. Oh yeah, he had a zit the size of a Frisbee on his forehead.

"How much is this speaker wire?" I asked (knowing full well that I would be here for the change of the millennium before I could get an answer). "That is the finest speaker wire ever known to exist anywhere," was his reply. "Well," I asked again, "how much does it cost to actually purchase a specified amount of this finely crafted wire?" At this point I thought it might be better to be as clear as possible as to my question. "We get the copper strands direct from a mill in the heart of the Amazon rain forest and the wire is hand-crafted by a small group of natives that are known to worship speaker wire so we pass the quality on to you," he said with a sense of pride that would have made Mr. Shack beam. One more try, I thought, as I heard myself say "If a person were to actually want to buy some of this finely crafted speaker wire and leave this store with a receipt showing ownership and a business transaction that was made right on the spot, today, then what would be the actual amount of cash that would have to be exchanged between that person and your fine establishment that so wisely, I might add, hired you to represent them in the retail marketplace. Sometimes flattery works. "Let me check on that sir," he said, "I'm pretty new here and I have to ask someone."

At this point I am really starting to wonder who there is that is qualified to answer a question so complex in nature and so very foreign to a retail establishment that brings in a few billion dollars a year nationwide.

Then "Jerry Lewis Pants" returned and was not alone. "This is the store manager" (an always impressive introduction), "Mr. Klumpf." As he stuck a rather pudgy hand out in my direction Mr. Klumpf informed me that "you can call me Sid!"

"Well Sid, I was just wondering what the price of this speaker wire is," I said as though this was the first time that the thought had occurred to



me as to ask the price of an item that I had made a special trip across town to "Pick up."

"That is no ordinary speaker wire that you have in your hand" he said through a grin that would make the porch scene from Deliverance look like a Mensa meeting. "You must know quite a bit about your speaker wire to choose this baby" he continued.

"Look Sid," (by now my voice was starting to lose normal range and I was sounding like a cross between Barney Fife and the speaker at a Taco Bell drive thru. "I know all about the history of this speaker wire, I can honestly appreciate how many little Amazon Indians gave their lives to hand forge each and every strand of this handcrafted wonder of the world and I can only imagine" (I continued) "how dangerous it must be to mine all the copper that is needed to craft this wire, not to mention how difficult it is to roll it up all nice and neat on this little tube so that the consumer can enjoy the convenience of it all...WHAT'S IT COST SID?"

"Let me see here," he mumbled, "this is our number 3704-1 wire, you realize that this replaces the old 3703-2 that pretty much set the standard for digital sound reproduction don't you?" "Yeah Sid I read all about the upgrade in Time Magazine, that's why I'm here," I said as though I was being grilled by the FBI. "OK, I think we can help you he said. Not without a note from a loved one and a mop, I thought to myself.

"You're looking at 32 cents a running foot!" "Great!" I Shouted feeling more than triumphant in my quest, "I need 25 feet of it." "We only sell it in rolls of 200 feet" was his return to my obvious moment of joy. Anyway I ended up leaving the confines of the store with about 190 feet more speaker wire than I needed and a ringing sound in my head that other people could actually hear as I drove by. There is a lesson here though, if you have any doubts as to the level of your sanity and you begin to wonder why things are always going wrong keep in mind how tough things would be if you were born in the Amazon and showed any natural abilities and skills in the art of wire forging. ♦



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DIRECT DIAL

by Brian Gallagher

RAMPANT RAY-TRACING

Nestled in the suburbs of Dayton, Ohio, a small one line BBS has something for the world to see: POV-Ray graphics. Harry Rowe's, Windows World BBS, (513)866-8181, running Excalibur windows based software is filled with the best and latest Ray tracing graphics available. (Ray-tracing is a process of mimicking the path of light rays to create a photo-realistic image.)

The system first opened in December of 1993 with the title "Eminent Illusion" and switched to "Rowe's Ray Tracing World" in March when a user uploaded him a Ray tracing image and, "I just went crazy," he said. From May through August of this year the board, and sysop, were on hiatus coming back online in August with the Windows World title and a rather substantive Rowe's Ray Tracing area.

Running on a 486/DX 33 with 12 megs of RAM, Rowe spends much of his time working on Ray tracing images of his own, while the Excalibur BBS software runs in the background reduced to an icon. As a sysop, Rowe cannot see the actual screens that his callers see, much like most BBS software programs when it comes to RIP graphics - with the notable exception of Searchlight, but his users will enjoy



Sysop and Ray-tracer Harry Rowe and Family

all the advantages of a Windows interface with bit-mapped images for backgrounds.

You will have to download the Excalibur terminal software to be able to use this system, with an average throughput of 1400 characters per second, it took a little over seven minutes to download.

Installation is relatively simple but, I found the screen on the terminal package surprisingly sparse. For a graphical system, you'd have thought they'd jazz up the front-end a little.

Running version .72, the software was surprisingly stable. Try as I might, downloading a file and tagging seven or eight big files to follow, going to other

areas of the system while downloading, multi-tasking under Windows and actually running other programs simultaneously, I was able to lock my machine up only once.

The board specializes in the latest Ray-tracing software, with POV-RAY v.2.2, Polyray v.1.7 and Moray v.1.53 being the most popular. POV-RAY v.2.2, is a freeware ray-tracing program, developed by the Persistence Of Vision group. POV-RAY is most notable for having a slew of third party support. One of these third party additions is Moray, a 3-D wireframe modeling program used to build Ray-tracing scene files. Polyray, developed by Alexander Enzmann has one of the best integrated animation support of any shareware ray-tracing program available, according to our ray-tracing staff artist, Jeff Rouyer. You can see Jeff's work by downloading *morpheus.flm* off the board and an .flm animation viewer if you don't already have one.

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Windows World BBS main menu



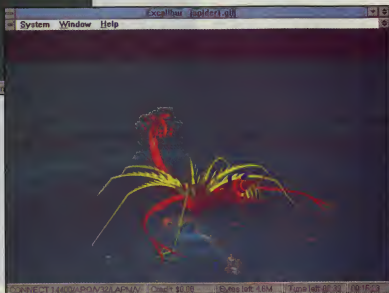
By far, ray-tracing is the focus of this system but, there are also executable files available for IBMs, Macs and Amigas. Rowe first started BBSing in 1989 when he purchased a modem so his wife, Renee, could access the University's computer system while working on her masters degree in mathematics. The man who sold him that modem also ran a BBS and things took their natural course from then on.

While Excalibur does not support outside message bases, (i.e. Internet or FidoNet), Rowe does manage to carry the Internet newsgroup [comp.graphics.ray-tracing](#) through another area board, and he also mentioned CompuServe's GraphDev as a good source for ray-

tracing fans. The system has 205 callers and access is free.

Windows World BBS, attn: Harry L. Rowe, 607 Gray Goose Ct., West Carrollton, OH 45449; (513)866-8181. ♦

Ray-traced images, (left) "Androld.gif" by Alexander Enzmann and (bottom) "Spider1.gif" by Harry Rowe found in the Ray-tracing and Graphic Files area on Windows World BBS



BEWITCHING BULLETIN BOARD

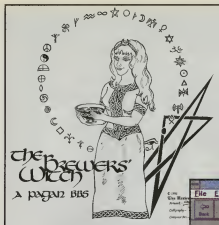
Bulletin Boards have always been known to bring individuals with like interests together in an electronic forum for information exchange, no matter how obscure or diverse that interest may be. One board, the three line Brewers' Witch, (713)272-7350 of Houston, Texas running Waffle shareware software, is such a system - serving the community of Pagan worshippers in the area and around the world.

The board is run by Bill Wiley Smith, (a brewer of Meade - a honey based wine that was historically the drink of kings), known as Lord Donal Dubh in some circles and simply "Donal" on the board. The reason for the extended title is interwoven with the heritage and history of pagan worship as a whole, and looking at the message traffic on this system will remind one that, yes, Paganism is alive and well. And there are more titles to be had in this unorthodox world, for instance, Smith resides not in Houston, Texas but, (according to the Society for Creative Anachronism - a medieval recreationist society), in the Kingdom of Ansteorra (including all of Texas and most of Oklahoma), the Barony of The Stargate (because NASA is located in Houston), and the Canton of Dun Bruadair.

So what does all of this mean? It is not a series of role playing games taken to the nth degree, and it is not an off-shoot of the very commercialized renaissance festivals held throughout the nation; Pagan worshippers are every bit as devout about their religious beliefs as any other sect of religion. In the popular newsgroup, [mn.taproom](#), (created by Smith with "mn" standing for magick net), there are



Sysop Bill Wiley Smith, aka Donal of the Brewers' Witch BBS



**left: T-shirt art
done by Brewers'
Witch users**

**Bottom: Home
page
[http://www.sccsi.
com/~brewitch](http://www.sccsi.com/~brewitch)**

frequent postings about religious beliefs from all fronts, with Smith adding that next to Pagans the board also has a surprising number of Baptist and Catholic callers.

Occasional postings damning the Pagan worshippers to an eternal purgatory are not uncommon either. Smith said such messages generally come from those who do not understand what it is that Pagan worship is all about. For instance, he says, despite popular belief, Pagans do not worship Satan. According to Smith, Pagan worship is centered largely around religious practices before the wide-spread influx of Christianity and since Satan is a part of Christianity they could not worship Satan. Another Pagan sect, the Wiccans, do not believe in Satan for a different reason, basically because Satanism carries a negative connotation, and Wiccans are not negative.

The dictionary definition of a Pagan found on The Brewers' Witch home page: <http://www.sccsi.com/~brewitch>, (which Smith's Internet provider maintains for him and he updates through a UUCP connection), is a person who is not Christian, Moslem, or Jew, heathen. To better understand today's interpretation of Paganism, the home page also offers this definition: "In modern use, a Pagan is a member of one of many alternative religious traditions. Many but not all of these traditions include a reverence for Goddess as well as God, acceptance of the Earth as our Mother, the practice of Magick (Witchcraft or simply The Craft) and belief in the Wiccan Rede and Three-Fold Law."

Despite dictionary definitions, the precepts by which many of these Pagan's live appear to be an interpretation of The Golden Rule. The Wiccan Rede states simply, "An It Harm None, Do As Thou Will," and "The Three-Fold Law tells us that everything we do, in this life, will return to us, in this life, three times." Both of these definitions can be found on the still under construction, but functional, home page of The Brewers' Witch.

Smith started the BBS in May of 1992, and has found that the bulletin board has afforded a medium of exchange for the differing Pagan sects to voice their opinions and views without anyone getting hurt - at least physically. The system has played a large part in cementing the differing Houston Pagan sects into a more solid community, largely due to Smith's organization of Pagan's Night Out, or PNOs, where he said the conversation has nothing to do with craft or beliefs, but centers more around social chatter found in any environment where friends are gathered.

Born and raised a Catholic, Smith first realized there wasn't something entirely in sync with his religious beliefs in an Asian religions course during his sophomore year in college. "I saw a whole other view of religion," he said, "It was a real eye-opener." This class made him uncomfortable with Catholicism, yet he wasn't entirely comfortable with the precepts of Zen Buddhism or Hinduism studied in the class either. Realizing he was not a Christian, it would still be several years before he discovered what he was a Wiccan, he said.

Smith, for the most part a self-taught programmer with some college experience, first wrote a program for a TRS-80 model I computer the day after he saw it, and was working as a programmer only nine months later.

Since then, he has held various programming jobs writing software for the heating, ventilation and air conditioning industry, where he became accustomed to Unix and more recently working for a local computer service company. While employed here, a fellow employee who knew of Smith's Pagan beliefs, funneled the Usenet newsgroup **alt.pagan** to him so he could read it. With anywhere from 60 to 200 daily messages on the newsgroup, Smith decided to set up his own system with a UUCP link for newsgroups and e-mail so he wouldn't be spending time at work reading the newsgroup.

Through this same friend at work Smith obtained a copy of Waffle shareware software running under the Unix operating system. Originally written as an offline mail and news reader, Waffle evolved into an operable but somewhat clunky operating system for a BBS, which Smith has configured to run all three nodes off of one 486/33.

The most popular areas of the system are the **alt.pagan** and **mnt.laproom** newsgroups which are read by nearly all of the callers. Other attractive features include a Zine List of Pagan publications including "Druid Times," "Council of the Magical Arts," "The Crossroads," "Circle Network News," "Green Egg," and 12 others; a Shop List, identifying over 23 Pagan shops in the Houston area, and a BBS List of Pagan boards in the area including the Horned Owl BBS, (713)781-4659; and Solstice Bells, (512)443-7402 among many others.

Maneuvering through the system, as I said, can be a bit clunky as I found myself entering a "?" character often but, with a little practice and patience it all works out in the end. Brewers' Witch T-shirts are available on the system, a preview of the graphics on the shirt done by a variety of area Pagan onlineers can be found in the file: **bwshirt.bmz** in the **usr2/files/general** directory.

The board supports multi-line chat, carries PODnet (Pagan and Occult Distribution System Network), MageNet, NuitNet, SkyNet and MagicNet echoes, and supports SOUP/Heldriver, QWK, Blue Wave and Zip News

Subscriptions vary from \$10 to \$100 per year with varying access and online times, discounts for students and teachers are also given.

The Brewers' Witch, Bill Wiley Smith, aka. Donal; Internet: donal@brewitch.com; (713)250- 9375 voice mail; (713)272-9487 BBS 14.4 kbps; (713)272-6232 BBS 14.4 kbps, (713)272-7350 BBS 9600 bps. ♦

TWO SEEDS OF A SINGLE SYSOP

There is at least one man in the online community who isn't piping the praises of the Internet with every breath, but he does have his song to sing. It's a song of smoking speed and transfer rates, with a chorus that beats ISDN, or International Switched Data Network - a telco nightmare it seems as they struggle to keep up with the demand of T1s and 56 kbps leased lines letting ISDN, for the moment, fall by the wayside. But, it is available in some areas, and some bulletin boards do have it now, and more are likely to have it in the future.

The big draw towards ISDN are data transfer times. Ken Morrison, sysop of the Northern Telecom's six line Digital Velocity BBS, (919)992-3059 analog, (919)992-0407 ISDN, notes speeds of over 7000 cps, (characters per second) when using ISDN compared to 2,700 cps for a 28.8 kbps modem connection. Northern Telecom, which manufacturers hardware (switches) for ISDN, opened the Digital Velocity BBS in May 1993, located in Research Triangle Park, North Carolina, to inform the public, (and particularly Fidonet sysops), of the advantages of ISDN data transfers and connections.

The reason for targeting the particularly narrow area of Fidonet sysops is the large amount of data exchanged between the major hubs and the rest of the world, with ISDN they can find substantial savings if that is, it is available in their area. To find that out, log on to the board and check out the bulletins menu, option #3 offers contact information for ISDN telcos, they'll help you discover if in fact you can connect to ISDN, how much it will cost you and where it is that you'll have to go.

The system keeps an ISDN FAQ (frequently asked questions) for those who don't know what this form of networking has to offer and has a list of all ISDN boards known to Morrison and Northern Telecom, (25 at this writing). If you are ISDN connected and are not on the list, please let him know and you'll be added as soon as possible.

There is an ISDN Vendor Services Center also on the bulletin menu, giving callers a place to test market ISDN products before releasing them. Here programmers can test their product's PRI, BRI, Packet and Multi-Rate interoperability; get a feel for the robustness of their creation and do a final round of debugging before it goes out on the wires to the rest of the world.

For Morrison, his route to being the sysop of one of the fastest systems in the country didn't start by playing games on an Atari when he was four years old - there weren't computers when he was that age. Joining the Marine Corps after high school and serving for 14 years including two tours in Vietnam, he came back to the states and took a little time off to see the country on a 1978 Honda 750 four K motorcycle.

He traveled from North Carolina down through Georgia, Texas, over to Arizona and the Grand Canyon, and California and the Yosemite National Forest before heading back home some year and a half later. Back in North Carolina at 37 years old he figured it was time to get some sort of a profession going so he went to a local technical college and entered a two year program on machining and tool and die manufacturing. He finished the machining part of his studies and before he could complete the tool and die requirements received a job offer.

It was 1981 when he went to work for AMP Inc., a connector manufacturer making plugs for automobiles, appliances, computers and the like. Three years later he found a job working for Northern Telecom where he was a PEST, (Production Equipment Support



High-speed Sysop Ken Morrison

Technician). In this position he was exposed to the gamut of what makes things work, how and why they work and how to fix them, as he was responsible for keeping the electrical, (including lasers), pneumatic, and mechanical functions of various types of robotic equipment operating at peak performance.

From October of 1984 through June of 1991 he stayed in this position and gleaned much of his knowledge about electronics and computers. He left Northern Telecom for a short nine months to pursue a better offer in Florida. But he wasn't happy in Florida, and his wife, Pat, still in North Carolina and working for Northern Telecom, got a big promotion prompting him to return back home. The one good thing that did come from his Florida travail was purchasing his first PC just before he left.

So what did he do with his first computer when he got it? "I ripped it apart," he said, "I wanted to see what made it work." After studying its innards he reassembled the machine and discovered, much to his consternation, it was slow, "very, very, very slow." He also found computers to be quite boring after a relatively short amount of time, that is until a friend suggest he run a bulletin board.

At the time he still thought a path was something that you walked down, but he figured he'd give it a shot anyway. He downloaded a copy of TAG BBS, unzipped it and has been running his own BBS, the Outland, (919)662-9313 ever since. The board, first online August of 1992, was originally designed with a science fiction orientation, (named after the Sean Connery film of the same name), but quickly fell to a pretty fair file and message system.

By May of 1993 he was already at two nodes with 300 users, but he wanted more out of his software package and when he met up with another local sysop who was running PC Board, he switched to that software in June of 1993, noting that he feels PC Board is very "sysop friendly."

Today, there are six gigabytes of files (over 35,000) on the system with 250 Fidonet message areas, 230 Internet message areas, 19 FLYNET message areas and 27 files areas (for pilots), and 35 IGA.NET message areas. The system supports Internet e-mail and Usenet newsgroups with areas in LINUX, Unix, Macintosh, ISDN, genealogy, Star Trek and RC (remote control) models being a favorite. Is he an RC buff? No. He had two of those little gas airplanes that you fly with strings when he was 10 years old and destroyed them both in under 15 minutes - he just carries the conferences

because, like many other conferences on the Outland, his users want them.

It was at the behest of Morrison that the Digital Velocity, originally running The Major BBS, switched to PC Board simply because Morrison was more familiar with it. Therefore, it is not surprising that logging on to one or the other of the two systems, (Digital Velocity or Outland), that they look like identical - unmistakably progeny sired by a single sysop.

There are no subscription fees for Northern Telecom's Digital Velocity BBS, it is free through and through. For the Outland, however, subscriptions are \$45 per year for 90 minutes per day and \$55 per year for 120 minutes per day. Both subscription packages for the Outland come with full access including unlimited downloads and e-mail.

Northern Telecom's Digital Velocity BBS, attn: Ken Morrison, 4001 East Chapel Hill, Nelson Highway, P.O. Box 13010, Research Triangle Park, NC 27709-3010; (919)992-1959 voice; (919)992-3059 BBS analog; (919)992-0407 BBS ISDN. The Outland BBS, attn: Ken Morrison, (919)662-9313 BBS; (919)662-9353 BBS, Internet: ken.morrison@outland.raleigh.nc.us. ♦

ISDN LIST.....

1. DIGITAL VELOCITY BBS	1-919-992-0407	RTPNORTH CAROLINA
2. NASHVILLE EXCH. #2	1-615-327-2270	NASHVILLE, TENNESSEE
3. TSI BBS	1-615-662-7649	NASHVILLE, TENNESSEE
4. RX SHOP	1-615-646-9481	NASHVILLE, TENNESSEE
5. THE QUAGMIRE BBS	1-615-446-9355	DICKSON, TENNESSEE
6. COMPUTER SOLUTIONS	1-615-356-8801	NASHVILLE, TENNESSEE
7. THE LAB	1-615-446-1976	DICKSON, TENNESSEE
8. COMPUTER CONNECTION	1-615-446-5295	DICKSON, TENNESSEE
9. PLANET SYSTEMS	1-615-623-4816	NEWPORT, TENNESSEE
10. JOHN FINNEY	1-615-634-7098	CHATTANOOGA, TENNESSEE
11. MAXSPEED	1-615-842-5709	HIXSON, TENNESSEE
12. CENTER FIELD	1-901-368-4702	MEMPHIS, TENNESSEE
13. THE SOUTHERN STAR	1-504-525-7932	NEW ORLEANS, LA
14. AUTOMATION CENTRAL	1-408-435-2886	SAN JOSE, CA
15. PACIFIC BELL	1-510-823-4888	SAN JOSE, CA
16. HAYES	1-404-729-6525	ATLANTA, GA
17. INDEX SYSTEM	1-404-428-0060	ATLANTA, GA
18. EXEC.PC	1-414-789-4477	ELM GROVE, WI
19. THE DIGITAL RODENT	1-615-831-1725	NASHVILLE, TN
20. THE VOICE PHRED!!!	1-415-359-8237	PACIFICA CA
21. PA ONLINE	1-717-657-9850	HARRISBURG, PA
22. UP THE CREEK	1-209-521-2196	SAN JOSE, CA
23. SWIZZLE STICK!	1-415-615-9525	SAN FRANCISCO, CA
24. MY SECRET GARDEN	1-318-686-0151	SHREVEPORT, LA

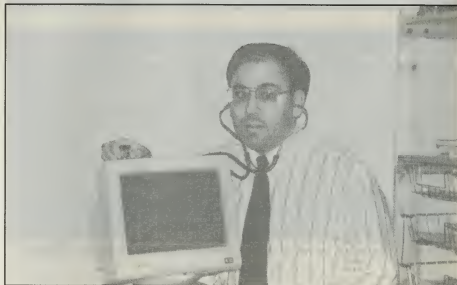
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HOUSE CALLS

If you have been looking for the cure to what ails you, and you would like to find it online, chances are you'll find the system with your answers somewhere in Edward Del Grosso's medical BBS list. Del Grosso, a doctor, first started keeping the list while a student in medical school in 1983 with only six systems. Today there are over 287 medical BBSs on Del Grosso's list, and they are yours to download off of his BBS, the Black Bag, (610)454-7396, in Collegeville, Pennsylvania, or to obtain a copy through the Internet send a blank message to: list@blackbag.com.

Del Grosso updates the list quarterly and personally logs on to each and every board to be sure they are truly medically oriented. It takes him a full month to verify all of the systems on the list, (there is an approximate 10 percent turnover with a steady trend upwards), giving him a phone bill of around \$500 for the month. Having kept the list for over 10 years, one of the longest list keepers we are aware of, Del Grosso has noticed more than a few trends over the years.

He said, "...the adoption of higher-speed modems is happening much quicker these days than in the past." For instance, when 28.8 kbps modems were introduced last year, he noticed that about 10 percent of

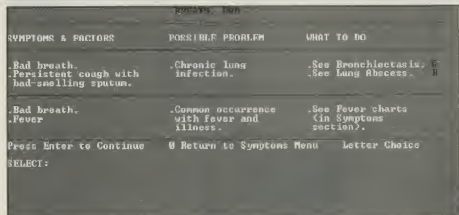
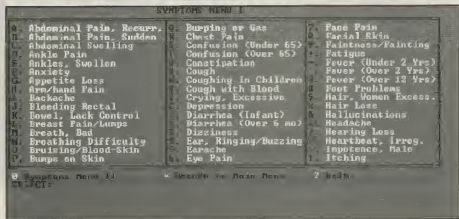
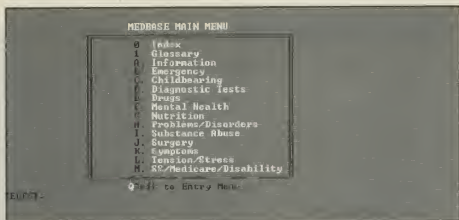


Dr. Edward Del Grosso of the Black Bag BBS

the systems had these higher-speed modems "right away." By comparison, it took around two years for 14.4 kbps modems to really gain a foothold upon their introduction, and it took longer still for 1200 bps modems to work their way out.

The list is broken down by states and includes the software the systems are running because there are certain systems that Del Grosso feels people will just not

want to call because they have an aversion to the software. By including the software brand, he feels he is saving these individuals from calling a system they know they won't like anyway. A recent trend he has noticed is "...a lot more (Wildcat!) systems then there used to be." In fact Wildcat! BBSs comprise 20 percent of the systems listed or 58 boards, with a surprisingly strong showing by Maximus shareware boards with 14 percent, followed by



Finding the cure to what ails you with the Black Bag's Disease and Symptom Database

Remote Access and PCBoard both at 13 percent.

While in medical school at Ohio State, De Grosso learned about the online realm from Gordon Black, then the sysop of CompuServe's MedSig. Soon he had the itch to run his own system and used a student loan to open up the Black Bag running RBBS shareware software in June 1985. He originally believed the board would serve mostly the professional medical community but, has since found that only 20 percent of his callers are in the medical profession with the majority

of callers being laypersons looking for answers to health questions or ailments.

Over the years the board has gone through several software platforms including the original version of Fido, Opus, and is now running Maximus but, De Grosso is switching yet again, this time to TBBS - he has the software only he hasn't found the time to switch it over yet. The four line system has two 286s running two nodes, two 386s running the other two nodes and a 486 DX2/66 with a 1.5 gigabyte hard drive acting as a server - all connected via a Lantastic LAN.

With 60 calls per day and some 2500 users, (99 percent of whom call long distance), Del Grosso finds the estimated 9,000 medical shareware files to be the most popular attraction in addition to medical echoes from Fidonet, ADAnet (Americans with Disabilities Network) and the Internet medical newsgroups.

The system also features a slew of government provided information from sources including the Morbidity and Mortality Weekly Report, Food and Drug Administration reports, the National Cancer Institute and others - most of which he obtains through the Internet via a Holonet UUCP account, where he also receives Internet e-mail. Of all the medical information available on the board the newly added Disease and Symptom Database is likely the most valuable area for callers looking for answers to medical questions. From bad breath to ear infections, chest pain to facial skin, the database offers callers quick and easy access to likely culprits of discomfort.

Besides medical information, the Black Bag also offers NASA News, earth and science information in their SKYLINE area, Physics News, the latest weather information for Collegeville and BYTE daily computer news. With all of this information and the most comprehensive collection of medical information found on any BBS, it is no wonder computer columnist John C. Dvorak called this system "One of the 10 best BBSs in America."

Registering on the system will grant callers free access to the message areas, file areas, offline readers, disease database and bulletins, AIDS Stats, Health Reform updates, AIDS Treatment News, Health Newsletter, FDA News and other online newsletters. The free access restricts callers to 60 minutes of online time each day, a maximum downloadable file size of 50 K, and maximum downloads of 50 K per day. For \$50 per year, or \$25 for three months callers will be upgraded to contributor status and will receive 90 minutes online time per day, no limit on downloadable file sizes and up to five megabytes of downloads per week. For those who have a moral dilemma with sending money to a computer bulletin board, contributions will also be accepted for the Mental Health Association of Collegeville. Full access to the disabled is free.

Black Bag, attn: Edward Del Grosso, P.O. Box 632, Collegeville, PA 19426; (610)454-7396 BBS; Fidonet: 2614/706; Internet: blackbag.com. ♦



287 MEDICAL BBSs

Name	Number	Interest	Soft-	Name	Number	Interest	Soft-
FDA BBS	800-222-0185	PHARM	CUSTOM	Nurses Corner	407-299-4762	NURSE	MAXIMUS
National Kidney Cancer	800-280-2032	CANCER	WILDCAT	Recovery	407-687-0573	RECOVERY	WILDCAT
FDA Medwatch Reporting	800-332-7737	PHARM	CUSTOM	Firehouse	407-795-2151	FIRE	WILDCAT
BUDDY BBS	800-449-2252	BLIND	WILDCAT	Venice Recovery	813-492-9592	RECOVERY	RBBS
Grateful Med Support	800-525-5756		TCOMM	Jaws	813-528-8903	BLIND	MAXIMUS
AIDS Ministries	800-542-5921	AIDS	MAJOR	Cancer Connection	813-688-9877	CANCER	VIRTUAL
NBIAP	800-624-2723	BIOLOGY	PCBOARD	Health Source	813-979-7307		RBBS
NIH Information	800-644-2271		WILDCAT	Information Exchange	904-254-3867	BLIND	WILDCAT
HNS HIV NET	800-788-4118	AIDS	WILDCAT	APCO	904-322-2053	FIRE	REMOTE
ADA Net	205-254-6050	DISABLE	PCBOARD	THE ENABLER	404-491-0054	DISABLE	PCBOARD
UAB	205-975-6078		WILDCAT	Emergency Room	404-497-9059	EMS	WILDCAT
Arizona Medical Association	602-246-6517		WILDCAT	MedStat	404-728-0452	FIRE	GTPOWER
New Parents Network	602-326-9345	SOCIAL	REMOTE	Medical/Dental	404-740-1569	BILLING	MAXIMUS
Tucson Chronic Fatigue	602-790-7420	CFS	TBBS	Total Recall	404-920-0621	RECOVERY	WILDCAT
Tucson Prologue	602-322-8014	DISABLE	REMOTE	med1bbs	912-633-1227		WILDCAT
ADAP	501-329-0368	RECOVERY	REMOTE	Kaiser Health Network	808-822-1289		WILDCAT
Steps of DC West	310-436-9595	FIDO		Check Source	217-244-6954	XRAY	MAXIMUS
Ocular Skis	310-596-9467	EYES	WILDCAT	Deal Connection	305-764-9355	DEAF	PCBOARD
Shrink Tank	408-257-8131	PSYCH	WILDCAT	COPH 2	312-436-0559	DISABLE	WILDCAT
LINCS	408-294-6933	SOCIAL	WILDCAT	Emergency Public	312-631-3467	EMS	MAJOR
Recovery	415-255-2188	RECOVERY	REMOTE	Silicon Implants Online	312-685-6360		PCBOARD
The Bridge	415-368-2778	DENTAL	MAJOR	I CAN	312-736-7388	DISABLE	MAXIMUS
The Bridge	415-368-2778	DENTAL	MAJOR	Eye Resources	708-299-0687	EYE	REMOTE
FOG City	415-863-9697	AIDS	TBBS	National Kidney Cancer	708-332-1052	CANCER	WILDCAT
Baytalk	415-864-6430	DISABLE	TAG	Chicago ACS	708-647-8364	CHEM	SPITFIRE
Jandel Scientific	415-924-5443	SCIENCE	AUNTIE	Mid West InPharmation	708-933-9499	PHARM	GTPOWER
El Cerrito Public Safety	510-235-3273	SAFETY	WILDCAT	Hazardous Management	708-972-0573	HAZZARD	PCBOARD
Blink Connection	510-276-4121	BLIND	TAG	CFS Support	815-433-8959	CFS	WILDCAT
OASIS	510-444-8246	OVERATE	REMOTE	Special Needs	219-659-0112	DISABLE	MAXIMUS
Dial Health	510-528-2900	ROBO		Virtual Recovery	317-298-4873	RECOVERY	REMOTE
DCCG BBS	510-841-5621	DISABLE	QUICKBBS	Testing Station	317-846-8917	PSYCH	WILDCAT
Help Info BBS	619-275-0146	SOCIAL	WILDCAT	Statistics BBS	316-687-0578		WILDCAT
Balboa Naval Hospital	619-532-8022		TBBS	ADA Info Center	913-296-6529	DISABLE	WILDCAT
911	619-669-0385	EMS	TELEGARD	Doc Talk	913-588-4838		PCBOARD
HIV/AIDS Info	714-248-2836	AIDS	TBBS	South of the River	913-642-7907		REMOTE
WellSpring	714-856-7996	RBBS		Code 3	502-375-4657	EMS	WILDCAT
KIRO Education	805-324-2955	BLIND	WILDCAT	Fido Racer	502-762-3140		OPUS
The Grateful Med	805-835-7340		TELE	Psychonominal	318-254-0274	PSYCH	WILDCAT
Public Seismic Network	818-797-0536	GEOLOGY	WILDCAT	Circle of Support	318-367-9916		PCBOARD
Feel Heal Ordeal	818-952-5157	RECOVERY	REMOTE	The Fire Scene	504-641-4789	FIRE	MAXIMUS
Calif Emergency Services	916-262-1657	EMS	SUPER	Mental Health Pro	207-493-3138	PSYCH	WILDCAT
RBBS BioMed	916-362-4298	BIOMED	WILDCAT	Custom Medical Search	301-309-6492		PCBOARD
EMSA Net	916-445-9363	EMS	WILDCAT	Cesar Board	301-403-8343	RECOVERY	PCBOARD
OSPD	916-653-4632		WILDCAT	Nutrition BBS	301-436-5078		RBBS
NVFC FireWatch	303-452-0105	FIRE	REMOTE	Bureau of Health Profession	301-443-9513		WILDCAT
Charg SCCORE	303-830-2557	MENTAL	WVWV	EMI	301-447-1259	EMS	WILDCAT
DisAbility Works	303-989-6156	DISABLE	VIRTUAL	NIH Information	301-480-5144		WILDCAT
Fire Net Leader	719-591-7415	FIRE	MAXIMUS	Deaf New World	301-587-2278	DEAF	WILDCAT
School Deaf/Blind	719-632-8180	DEAF	REMOTE	Able Info BBS	301-589-3563	DISABLE	PCBOARD
North West EMS	203-264-9482	EMS	RENEGADE	HEX	301-593-7357	DISABLE	CUSTOM
The Pharmacy	203-269-5640	PHARM	RENEGADE	FDA	301-594-6660	PHARM	CUSTOM
AEGIS Connecticut	203-467-8554	AIDS	MAXIMUS	BBS Mumps	301-948-6825		MAJOR
Hippocampus BBS	203-484-4621		RBBS	The Idea Link	301-949-5764	SOCIAL	PCBOARD
AEGIS/Danbury	203-744-0179	AIDS	MAXIMUS	BFRBBS	301-990-2272	FIRE	SEARCH
12th Step	203-852-1986	RECOVERY	MAXIMUS	MD State Fireman's	410-536-1935	FIRE	RBBS
Handicap News	203-926-6168	DISABLE	MAXIMUS	Nerve Center	410-655-4708	DISABLE	MAXIMUS
PC Nurse	302-335-3088	NURSE	WILDCAT	NFB	410-752-5011	DISABLE	MAXIMUS
Defire BBS	302-739-6757	FIRE	TELEGARD	Cesapeake Free Net	410-819-6860		PCBOARD
Clearinghouse Computer	202-219-0132	DISABLE	MAJOR	The Fire Station	410-866-8613	FIRE	REMOTE
Quick Facts	202-289-4112	RECOVERY	MAJOR	Trilogy	410-880-0965	NURSE	QUICKBBS
Americans With Disabilities	202-544-6193	DISABLE	RBBS	Braille Speak Out	410-893-8494	BLIND	OPUS
State and Local EMS	202-646-2887	EMS	PCBOARD	Berkshire Fire	413-448-8292	FIRE	MAXIMUS
OASH	202-690-5423	AIDS	TBBS	Boston Gas	413-539-9834		PCBOARD
Face to the Wind	305-270-2489	RECOVERY	WILDCAT	Physics Forum	413-545-1959	SCIENCE	MAXIMUS
Med Talk	305-452-9941		WILDCAT	Dimenet	508-880-5412	DISABLE	CUSTOM
PC Tumor	407-234-1287	CANCER	COURIER	Tune'n Tufts	617-350-8513		WILDCAT
Med LIFE	407-292-1427		WILDCAT	Boston AIDS Consortium	617-432-2511	AIDS	CUSTOM
C Florida Psych	407-294-2864	PSYCH	MAXIMUS	Mass Comm for the Blind	617-451-5327	BLIND	CUSTOM

Name	Number	Interest	Soft-	Name	Number	Interest	Soft-
V/BUG	617-767-2909	BLIND	OPUS	ECIR Net	610-825-9284	BIOMED	TBBS
Pharmlink	617-784-1367	PHARM	PCBOARD	Emergency Services	717-566-3500	EMS	MAXIMUS
MMS Online	617-893-2170	SEARCH		Periscope	803-650-9022	EYE	MAXIMUS
Scene	313-941-2176	FIRE	TAG	Memory Alpha One	803-684-0356	BILLING	SEARCH
AAPS	616-329-7569	PHARM	WILDCAT	Goose Creek Med	803-824-0317		REMOTE
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GLOBAL ELECTRONIC YOUR BULLETIN

The Personal Internet Mail Processor (PIMP) is an option module for eSoft, Inc.'s bulletin board system, The Bread Board System (TBBS). It allows any TBBS bulletin board to interact with the global Internet for electronic mail and USENET News Groups, and it provides one of the most integrated presentations of e-mail and newsgroups of any mail solution available in the online community. Callers to a TBBS system that has the PIMP option module will deal with global electronic mail in virtually exactly the same way they deal with local system e-mail - no ugly kludges or commands to learn to send mail to friends on CompuServe, Prodigy, America Online, or thousands of other sites in over 130 countries. If they have the Internet mail address of the person they wish to reach, they can send them mail without any further instruction at all. And all of your callers will have their own Internet e-mail address on your system. Anyone on earth can send them e-mail from anywhere, at any time.

PIMP imports RFC-822 style message files into the TBBS message base in real time. As a full TBBS option module, it loads with the BBS and operates continuously to import received mail to the message database, and export messages entered by callers for delivery to the Internet. It's primary function is as a message database import/export utility and mail gateway. And its main strength is that you do not have to take the system down at all - it operates in conjunction with TBBS to constantly import and export mail.

In the most common configuration, to participate in the global exchange of electronic mail and USENET newsgroups, you need three things:

1. A functioning TBBS bulletin board system.
2. A dial-up UUCP host account with an Internet Service Provider.
3. The Personal Internet Mail Processor (PIMP).

For delivery, PIMP is quite flexible:

1. It can work with an external Unix Copy Program (UUCP) program such as Waffle's UUCICO or FXUUCICO.
2. It includes its own internal UUCICO program that uses any unused BBS line and modem to dial your host and deliver mail as necessary, and pickup any waiting mail from your UUCP account host.
3. It is fully compatible with eSoft's Internet Protocol Adapter (IPAD) for direct connections to the Internet and the Simple Mail Transfer Protocol (SMTP) capability for instant message delivery, as well as Net News Transport Protocol (NNTP) provided by IPAD.

FEATURES:

SEAMLESS ELECTRONIC MAIL:

PIMP is very tightly integrated into the TBBS system. Callers simply enter an Internet address in the normal TO field of the message, and that's where the message goes. They can use the normal Rreply function of TBBS to respond to mail received from anywhere in the world. File attachments are still attached, messages can be forwarded, all the functions of the TBBS message system work as they do locally. Beyond the Internet addressing itself, your callers already know how to send and receive mail to any site on earth.

INTERNAL UUCP G PROTOCOL:

PIMP can use any unused BBS line to dial your host and do a full UUCP session, supporting Windows 7 and packet sizes up to 1024 bytes in size. This provides optimum UUCP protocol session performance to deliver mail and newsgroup messages to your host, and receive mail and newsgroup messages waiting for your BBS. You can use any available BBS line to do this, and can schedule this activity to occur as often as you like. Messages entered by callers can be scanned out and delivered in as little as one minute. Messages received from your host will be processed immediately after the call is completed.

USENET NEWSGROUPS:

PIMP can support an unlimited number of newsgroups, and an unlimited number of newsgroup messages. The TBBS total limitation of 60,000 messages in the message base still applies. Newsgroups are very easy to configure using TBBS's topical message base structure. PIMP can toss a single message to multiple newsgroups for crossposting, and it handles long subject lines and RE: message threading. Messages longer than the TBBS limit of 9999 bytes are broken into a series of successive messages. PIMP can also process satellite delivered .BAG files directly.

FILE ATTACHMENTS:

PIMP automatically and transparently deals with TBBS message file attachments. Messages received that include UUENCODED files are automatically decoded and presented as TBBS message file attachments to your callers and would appear to them exactly as any local message with a file attachment. Messages your callers send with a file attachment will automatically be UUENCODED for delivery to the Internet in a way that any recipient can easily decode to get the original file attachment intact.

MAILING LIST SERVER:

You can host your own Internet mailing list on your TBBS system. Correspondents can add themselves to the list automatically by sending an e-mail message to the system, and likewise remove themselves from the mailing list with a simple e-mail message. When join-

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ing the list, they will automatically receive any file you specify as a welcome text file. All messages addressed to the list will automatically be reflected to all list correspondents - no matter where they are.

FTP FILE SERVER:

PIMP can also act as a file server on a global basis. Correspondents from anywhere on the planet can send a simple e-mail message to your system requesting a specific file. PIMP will search the directories YOU make "public" for the corresponding file, and automatically send a reply message back with the file in UUENCODED format.

INFORMATION SERVER:

PIMP will allow you to define specific "information" addresses. Any correspondent can send a simple message to this address with no instructions of any kind in the message - just the act of sending mail to the address will cause an automatic e-mail reply containing any file you specify. In this way, you can make product information, company profiles, newsletters, or anything else available on a global basis for anyone to retrieve - all entirely automatically.

BOUNCE MESSAGES:

For every message your system receives, PIMP will automatically search your user database to see if the message is deliverable. If it is, the caller will find the message in their message waiting chain the next time they call. If the message is not deliverable, PIMP will automatically send out a reply message noting that no such user is registered at your site.

UUCP SERVER:

PIMP can actually act as a UUCP hub server as well as a client. You can setup callers with UUCP accounts allowing them to dial up automatically and retrieve mail and newsgroups using any UUCP mail package. Their mail will be waiting for them, as well as any newsgroups they specify they want to receive. And multiple callers or other BBS systems can call your multiline TBBS simultaneously to do UUCP mail transfers.

Each account is actually a subdomain under your domain. For example, if your domain name is BIGBBS.COM, you can setup hundreds of accounts with subdomains under yours such as REDSTAR.BIGBBS.COM, WHITE.BIGBBS.COM, JOESBBS.BIGBBS.COM, SALLY.BIGBBS.COM and so forth. You can even build "pyramids" of systems connected via UUCP.

TBBS APPLICATION SPAWNING:

eSoft also makes a database development option module called The Data Base System or TBDS. Almost ALL third party add-ons and programs for TBBS are actually written as a TBDS application. PIMP is NOT. PIMP is a 100% assembly language true option mod-

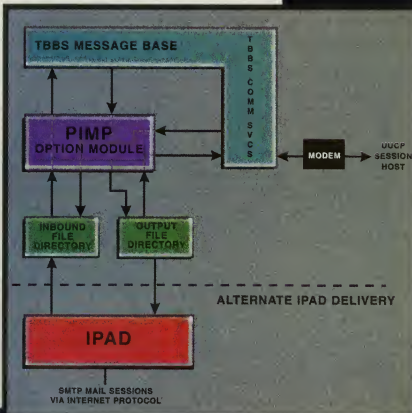
ule for TBBS similar to TBDS, ULTRACHAT, SYSOM, or other eSoft option modules. PIMP DOES NOT REQUIRE TBDS OR ANY OTHER TBBS OPTION MODULE FOR ANYTHING.

But PIMP CAN spawn or run other TBDS applications on receipt of mail or on creation of mail. In fact, it can run ANY TBDS application you specify and even run separate applications for receipt of mail from that run on creation of mail. So if you have some special mail pre or post processing you need for your application, you can develop this in TBDS and PIMP will run it for you. In fact, there are several such applications already available in the community.

IPAD COMPATIBILITY:

One of the most exciting developments for Internet connectivity is eSoft's Internet Protocol Adapter or IPAD. This component connects your TBBS system directly to the Internet using the Internet Protocol over leased lines or SLIP connections. PIMP and IPAD work together to provide almost instant global mail. The IPAD and PIMP can share inbound/outbound message directories with the IPAD providing SMTP client/server capabilities. PIMP feeds outbound mail to IPAD in the correct format and IPAD delivers it to its destination via SMTP. SMTP received by IPAD simply appears in PIMP's inbound message directory and PIMP adds it directly to the TBBS message base. USENET news is handled similarly.

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MicroSellar BBS (201)239-0001 Verona, New Jersey since 03/83. Sysop: Mark Rapp. Using PCBoard 15.2 with 20 lines on MS-DOS with 10000 MB storage. Hayes at 28800 bps. No fee. PCBoard 15.x alpha site. NJ's preferred BBS for the pro 11 yrs running. HiSpeed lines. Local #s available for easy access. Best-quality latest files games info gold mine. Many mail network files including Internet. Trial access provided. Major credit cards.

Synergy Online (201)331-1797 Parsippany, New Jersey since 07/93. Sysop: Jim Boxmeyer. Using PCBoard 15.1 with 30 lines on MS-DOS 80486 with 15000 MB storage. Cardinal at 38400 bps. No fee. 20,000+ recent shareware files. 4,000+ conferences. Internet, Usenet, RIME, UIN-net, Inetec and other networks online. Huge adult areas with over 10,000 GIFs. Daily weather, newspapers, magazines online. 30 Public lines available.

Central Core BBS (201)575-8991 Montville, New Jersey since 01/85. Sysop: Mike Cocks. Using PCBoard 15.1 with 3 lines on MS-DOS with 3500 MB storage. Zyxal at 19200 bps. No fee. A BBS for grownups of all ages. Free Internet trial access. Member of LInk and BASNet echomail networks. Upload credits for messaging. Online national weather reports. Scramble & trivia tournaments. Many technical interest files. No porn.

SuccessNet (201)653-6228 Hoboken, New Jersey since 11/84. Sysop: Al Arango. Using TBS 2.2 with 4 lines on MS-DOS with 2000 MB storage. US Robotics at 28800 bps. No fee. Want to succeed in business? Start or expand your own. Buy or sell, make contacts, sources of financing, business software, information, online databases, Internet e-mail, newsgroups, QWK support, UUCP support, your fast lane for support. Call now.

Afterimage Information Matrix (201)765-9090 Florham Park, New Jersey since 03/94. Sysop: Anthony Stramaglia. Using MajorBBS 6.2 with 12 lines on MS-DOS with 5000 MB storage. Multitech at 28800 bps. \$5 Monthly fee. An amazing variety of online action. MajorNet, Infinit and Internet newsgroups. Over 5GB of CD's and files. Multiuser games such as Global Destruction and 4-player DQM. Lush ANSI and RIF graphics. Active local and Interlink chatting. Call. Get Hooked.

The Garden of Eden BBS (201)939-5401 Ringwood, New Jersey since 11/92. Sysop: Frank Molino. Using WildCat 3.9 with 3 lines on MS-DOS with 800 MB storage. US Robotics at 14400 bps. \$50 Annual fee. 18 CDs online with over 95,000 files including adult gifs. New in-house scans added weekly. Adultlinks & Fidonet Conferences. Charge cards accepted for instant access. Visa MC Amex. Over 80 online doors & games Adultlinks, Fidonet, Doornet. Don't miss.

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Jezebel's Parlour BBS (201)927-2932 Flanders, New Jersey since 04/92. Sysop: Beverly Delisa. Using TBS 2.2 with 12 lines on MS-DOS with 3720 MB storage. US Robotics at 19200 bps. \$50 Annual fee. Over 7 gigabytes of files, including adult graphics. New in-house scanned GIF files added each week. Online games and databases, user to user chat, conference areas, and adult matchmaking. The BBS with the feminine touch.

The Starship II BBS (201)935-1485 Rutherford, New Jersey since 07/80. Sysop: Philip J. Buonomo. Using TBS 2.2 with 32 lines on MS-DOS with 10000 MB storage. V32bis at 14400 bps. No fee. Operating for 14+ years, Starship is one of the longest running, most successful bbs systems ever. Free public access, adult & non-adult topics, chat, files, games, & databases. USR, Hayes, Telebit, v32bis 19.2 kbps modems online, full internet access.

CHAT Seattle BBS (206)821-1835 Seattle, Washington since 06/06. Sysop: Mike Lillard. Using DLX 7.0 with 2 lines on MS-DOS with 120 MB storage. US Robotics at 19200 bps. No fee. In partnership with U.S.Forest Service, providing 2000 plus trails, campgrounds and campsites for the state of Washington. Weekly ranger reports available. The Mountaineers Club has online forum and library. Free and fee based services available.

T-Shirts Online (207)665-1806 Freeport, Maine since 06/94. Sysop: Mike DeVaudreuil. Using PCBoard 15.1 with 1 line on MS-DOS with 540 MB storage. US Robotics at 14400 bps. No fee. Upload your favorite graphic file and we'll custom print it on a high quality t-shirt and mail it to you. High resolution, full color pictures. If you can see it on your computer screen, we can put it on a t-shirt.

Exxtacy Adult BBS (209)962-4045 Pine Mt. Lake, California since 06/86. Sysop: Victoria Cummings. Using MajorBBS 6.12 with 4 lines on MS-DOS with 10000 MB storage. US Robotics at 14400 bps. \$25 Annual fee. Large hi-res adult file collection with thousands of erotic files. New member bonus - adult burlesque video tape of our California coeds with each membership. Also feature chat, online games, and more. Visa and Mastercard accepted online.

The Invention Factory BBS (212)274-8110 New York City, New York since 03/84. Sysop: Michael Sussell. Using PCBoard 15.1 with 48 lines on MS-DOS with 99999 MB storage. US Robotics at 28800 bps. \$15 Monthly fee. New York's best BBS. Free downloads for new users. More than 14 gig of shareware and freeware. Internet, Usenet, e-mail. Large adult files area. MC Visa Amex.

Real Exposure (212)691-2679 New York City, New York since 06/93. Sysop: Joey Havlock. Using WildCat 3.9 with 13 lines on MS-DOS with 6000 MB storage. Practical Periphs at 14400 bps. \$45 Half Year fee. Unique community of interactive NYC personalities meet here nightly for fun, informative chatting. REX is different; it's about people, learning and helping. This is NY's most creative environment. Free I/net email/news, FIDO, 18 CDROMs and much more.

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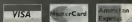
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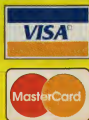
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The Christian Star (704)598-9611 Charlotte, North Carolina since 01/85. Sysop: Jane Carlson. Using TBBS 2.2 with 6 lines on MS-DOS with 1200 MB storage. Hayes at 28800 bps. \$10 Annual fee. Christian networking goals. Online database, files, and message conferences devoted to Christian Apologetics, Cult Information & Research, Bible Studies, and much, much, more. Teen Help & Christian singles sections, UltraChat, and multi-player games.

POPULUS II (706)569-0773 Columbus, Georgia since 05/93. Sysop: David McAfee. Using MajorBBS 6.12 with 2 lines on MS-DOS with 600 MB storage. Twincor at 14400 bps. No fee. Windows, programmer's support, C++, object-oriented programming, flash games, online chat, CD-ROM's, programming available. Fido, local messaging, and pay service Internet.

The Shareware Depository BBS (708)215-1895 Buffalo Grove, Illinois since 09/94. Sysop: Rich Keilman. Using MajorBBS 6.21 with 8 lines on MS-DOS with 1000 MB storage. Supra at 28800 bps. \$10 Monthly fee. Fun for everyone, games like Galactic Empire, Trade Wars 2002, crossroads, and message services from MajorNet and Net Access plus a chance to run your own forum, teleconference, ChatLink, and Game Connection for modem to modem games 18 CD-ROM's call now.

The Outer Limits BBS (708)289-0034 Chicago, Illinois since 05/92. Sysop: Mistress Crystal. Using Synchronet 1 with 12 lines on MS-DOS with 3000 MB storage. Various at 14400 bps. \$20 Quarterly fee. The Midwest's best D's, B/D & fetish online play party. Fantasy handles, chat, games, conferences, contests, AdultNet, and 3GB of files make us the board to explore your fantasies and play. Women free, plus no-harassment policy. Visa/MC. 21+ only.

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Liberty BBS (708)571-0015 Chicago, Illinois since 07/92. Sysop: David Salch. Using MajorBBS 6.21 with 18 lines on MS-DOS with 15360 MB storage. ZYXEL at 19200 bps. \$25 Monthly fee. Local access from Chicago & California. Nationwide chatLink, WorldLink, MailLink, MajorNet, Internet & Usenet newsgroups. Use your modem to call 800-474-1818 for local & low cost SprintNet nationwide access info. Chat, games, news, & much, much more.

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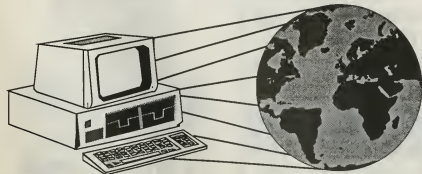
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Liberty BBS (714)996-7777 Anaheim Hills, California since 07/92. Sysop: David Salch. Using MajorBBS 6.21 with 183 lines on MS-DOS with 15360 MB storage. ZyXEL at 19200 bps. \$10 Monthly fee. Local from 6 California area codes & Chicago. Nationwide ChatLink, WorldLink, MailLink, MajorNet, Internet & Usenet newsgroups. Use your modem to call 800-474-1818 for local & low cost SprintNet nationwide access info. Chat, games, news, & much more.

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Channel 33 BBS (718)279-1585 Bayside, New York since 06/94. Sysop: Wham. Using MajorBBS 6.21 with 4 lines on MS-DOS with 1000 MB storage. Microcom at 28800 bps. \$15 Monthly fee. Info Entertainment BBS serving the Gay, Bi & Lesbian Community. Entertainment teleconference, Internet email & newsgroups, MajorNet, file libraries with adult section, forums, matchmaker, interactive and single player games.

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Programmer's Resource Center (908)535-9298 Elizabeth, New Jersey since 04/94. Sysop: Robert Villar. Using WildCat 3.9 with 2 lines on MS-DOS with 540 MB storage. Boca at 14400 bps. \$5 Monthly fee. This BBS caters to programmers and professionals. Thousands of source code files and tools to make life easier. On your first call, mention that you read Boardwatch and you get a Free 6 month subscription. Games and educational files available.

Isle-Net (908)495-6996 North Middletown, New Jersey since 10/84. Sysop: Dan Srebnick. Using TBBS 2.2 with 12 lines on MS-DOS with 2000 MB storage. US Robotics at 14400 bps. \$45 Annual fee. Internet mail, Usenet newsgroups, erotic fantasies written by members. Free chat on your first call. Challenging games, lots of files to download. Stop by and have your Tarot cards read online. We do it better because we've done it since 1984.

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NightVision (909)369-6556 Riverside, California since 11/93. Sysop: John Williams. Using WildCat 4 with 16 lines on MS-DOS with 6000 MB storage. US Robotics at 14400 bps. \$69 Annual fee. Free memberships available. Call for details. Monthly amateur GIF contests, Internet e-mail and newsgroups, massive library of adult GIF's and text files, group and private chat, online games, adult networks, matchmaker database.

StarBase 43 BBS (913)441-0542 Bonner Springs, Kansas since 10/91. Sysop: Mark Marshall. Using MajorBBS 6.21 with 1 line on MS-DOS with 8000 MB storage. Hayes at 28800 bps. \$10 Monthly fee. Hello im Mark Marshall of StarBase 43 BBS and i want to invite you to call my BBS! We have/tot to offer you here... onlines games, ton's of msg area's match maker! ALL the latest toy's a BBS'ER could want so come on over to my place in the sky! CYAL8R

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Aquaiel Online (914)667-0363 Mount Vernon, New York since 12/94. Sysop: John H. Reid III. Using MajorBBS 6.21 with 8 lines on MS-DOS with 1100 MB storage. US Robotics at 14400 bps. No fee. Shop and make purchases from your favorite catalog companies with online ease. View high resolution color photographs of every item for sale online. Enter the Village Green for an online chat or to express your opinion in one of our many forums.

The Leading Edge (914)888-4295 Wurtsboro, New York since 12/90. Sysop: Joe Germann. Using Remote Access 2.02 with 6 lines on MS-DOS with 6000 MB storage. US Robotics at 28800 bps. \$50 Annual fee. We have something for everybody, Internet e-mail, over 5000 newsgroups online. 6 CD-ROM's online, many of today's hottest doors, and lots of friendly users in our chat rooms. There's always something new. We're not the same old BBS. Give us a try free.

Black Gold BBS (918)272-7779 Tulsa, Oklahoma since 06/81. Sysop: Michael Cline. Using PCBoard 15.2 with 26 lines on MS-DOS with 40000 MB storage. US Robotics at 28800 bps. \$30 Annual fee. Full PageSat and Planet Connect. Telnet bgbbs.com, FTP, gopher, etc. Full time SYSOP's and much much more. Many free areas and files with 45 minutes free access per day. 350 file areas, 3+ million messages less than 7 days old. Never Porn/Just hard work

ACCESS AMERICA (918)747-2542 Tulsa, Oklahoma since 03/88. Sysop: Vance Martin. Using TBBS 2.2 with 5 lines on MS-DOS with 6,500 MB storage. Hayes at 14400 bps. \$25 /100 hours fee. Real Estate market with photos, internet mail & newsgroups, JOEMARKET Ultra Chat, QWK mail system, PhotoClassified ads, FidoNet, matchmaker & personal ads, multi-player ANSI & RIP games, 40,000+ files, & CD-ROM's, Oklahoma & Branson travel info & more.

Entertainment Club BBS (919)544-7811 Research Triangle Park, North Car. since 04/94. Sysop: Brian Womack. Using WildCat 4 with 4 lines on OS/2 with 10500 MB storage. Zyxel at 19200 bps. \$12 Annual fee. 1500+ file areas (40,500+ files & CDCROMs updated quarterly) 700+ message conferences, Internet email news, FidoNet, etc. 50+ registered multi-user games, color scanning, matchmaking connection (doors, parties), will add areas at user request. Bargain.

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TITLE	PHONE	DESCRIPTION	SOFTWARE
1. Software Creations	508-368-7139	The Primary Source for Entertainment Software	PCBoard
2. EXEC-PC	414-789-4360	Largest dial up BBS for shareware software	Custom
3. GLIB	703-578-4642	Gay & Lesbian information, Internet email, live chat	TBBS
4. Monetary Gaming System	408-656-6555	Custom interactive gaming and multi-user conference	Custom
5. Blue Ridge Express	804-790-1875	Large files base with 3 Gbytes and CD-ROMs	TBBS
6. Deep Cove BBS	804-536-5885	News, publications, Internet email, shareware	TBBS
7. AlphaOne Online	708-827-3519	Adults only, matchmaking, personals, email	TBBS
8. Jewelers & Suggestion Box	516-471-8625	13 Gigs of Shareware, Internet email, online publications	TBBS
9. Lifestyle Online	800-775-7714	Chat system, adult lifestyles, personals, email	TBBS
10. Prodigy Genealogy	214-690-9235	Information and help of searching for people	TBBS
11. Chrysalis	804-490-5878	34 CD-ROMs online, Internet email, online games	TBBS
12. Pleasure Dome BBS	404-924-8472	Adults only, matchmaking, BBS file, Internet IC	TBBS
13. INDEX System, The	717-557-5699	Online accounts, 10 Gigs online, Fidonet IC	TBBS
14. PennyPants Online	413-530-4365	4000 Usenet newsgroups, 8 CD-ROMs, family BBS	TBBS
15. Springfield Adult Access	703-395-4325	OS/2 support and shareware files	TBBS
16. OS/2 Shareware	215-443-7390	Full Internet, Internet accounts, full Usenet	TBBS
17. DSC	614-224-1635	No fees, full access on first call, 12 Gigs online	TBBS
18. Wizard's Gate BBS	708-820-3344	Winners largest database, message base	TBBS
19. Aquila BBS	819-481-9399	Internet, Usenet, Fidonet, shareware, online games	TBBS
20. Nashville Exchange, The	616-587-5311	Distribution & support for Telix	TBBS
21. GailComm Online	317-395-5199	US & World News, Stock information, national access	TBBS
22. File Shop BBS, The	215-381-3320	Large message base, shareware, file, chat, email	TBBS
23. Translators' Connection	610-439-1520	General BBS, messages, file, chat, email	TBBS
24. Son BBS	908-265-0189	9 Gigs online, chat, messages, games, matches	TBBS
25. InfoService	703-749-2860	Internet, Usenet, chat, messages, adult area	TBBS
26. The Son Systems	914-667-4098	5.7 Gigs, 25,000 files, 100 online games, echos	TBBS
		Large shareware system, chat, Internet email	TBBS
		mail 800 access, 10 Gigs online	TBBS
		games, Usenet, Internet, shareware	TBBS
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DVORAK ONLINE

by John C. Dvorak

RELIGIOUS WEIRDNESS

In addition to his weekly syndicated radio call-in show, "Software/Hard-talk," syndicated newspaper columns, magazine writing for *MacUser*, *PC Computing*, *DEC Professional*, *Information Technology*, and his featured "Inside Track" column in *PC Magazine*, Dvorak is the author of several best-selling books, including *Dvorak's Inside Track to DOS & PC Performance*, *Dvorak's Guide to PC Telecommunications*, and *Dvorak's Inside Track to the Mac*.

The Wackiness of the computer world never fails to amuse me. A recent screwball item is about a new computer program called "Online With Jesus." It's supposedly a program for Catholics worried about the results of an upcoming confession. You confess to a computer program. (Father ELIZA?) Unfortunately the program is misnamed. The word On-Line in any form should mean real-time connection. It shouldn't mean a program running in a stand alone environment. The problem is that the program is so lame that people will fail to notice this breach of naming conventions. (And gosh, that's what galls me the most.) For example, the program outlines dubious and somewhat propagandistic sins including (according to Reuters) "I failed to pray for my boss" and "I copied a computer program without permission." Has the writer of this program contacted the Pope about this?

REAL LIFE SITUATION:

SINNER (in confession booth): Forgive me father for I have sinned. It has been a week since my last confession. I have failed to pray for my boss. Please forgive me!

PRIEST: Like I care? Ten Hail Mary's for wasting my time you twit!

REAL LIFE SITUATION 2:

SINNER (in confession booth): Forgive me father for I have sinned. It has been a week since my last confession. I copied a computer program without permission.

PRIEST: Without permission? Permission from who?

SINNER: Well, uh, I never thought much about it.

PRIEST: Was it a back up or what? I don't get it. Did you pirate software or what?

SINNER: I copied it. I was going to use it at home. The Software Publishers Association says this is stealing.

PRIEST: Stealing? What did you steal? You copied. Are you copying and selling the software for a profit?

SINNER: Well, no. I just needed to run a spread sheet from work.

PRIEST: Was this a one-time deal? Are you expected to buy software to do your work at home. Was someone else using the same program at the same time? This is a grey area my son. Have you robbed anyone? Shot anyone? Anything serious?

SINNER: Uh, no. I've been too busy working 16 hour days.

PRIEST: The sin is upon the software vendors for making this hellish life of yours. A pox upon them. Son, you are admonished. And one more thing.

SINNER: Yes, father?

PRIEST: Quit wasting my time with this crap!

Now while this program is a dubious one, I don't see any reason why real online Priests can't hear confession. It's an anonymous practice, why not do it online with the Priest of your choice anywhere in the world? It's an interesting idea. True online confessions and online confessionals. Heck, do it on CompuServe or AOL while we're at it. And since the services are so anonymous why not open the forum and see what the heck people are doing for sin nowadays. I mean I don't want to trivialize the confession experience, but I don't see why we can't all be party to it. It's something of a trend anyway with all those weird TV talk shows on all day. People on there are confessing to the public at large incredibly stupid acts. This is especially true on the Jenny Jones and Rikki Lake Shows (although I never really watch this drive). You have to ask yourself exactly how much white trash is there in the South? "I know my wife hates me because I love and married my sister, but heck, my wife is my Mom! That's why I ran off with my daughter."

Real life confessions are at least as entertaining and the church might derive some needed income from an online service. Just a thought.

The other on-line wackiness that cropped up in the news was also religious and it involved finding the devil's number — 666 in all sorts of weird ways.

Here's a NET posting.

The real name of the Bill Gates is William Henry Gates III. Nowadays he is known as Bill Gates (III).

By converting the letters of his current name to the ASCII values and adding his (III), you get the following:

B	66
I	73
L	76
L	76
G	71
A	65
T	84
E	69
S	83
+	3

666 !!

Some might ask, "How did Bill Gates get so powerful?" Coincidence? Or just the beginning of mankind's ultimate and total enslavement??? YOU decide!

It looks like well-known OS's also fall into the same category:

MS - D O S 6 . 2 1

77+83+45+68+79+83+32+54+46+50+49
= 666

W I N D O W S 9 5

87+73+78+68+79+87+83+57+53+1
= 666

S Y S T E M 7 . 0

83+89+83+84+69+77+32+55+46+48
= 666

Coincidence? I think not!

If you look closely at this, it's a stretch (except for System 7). The most overlooked aspect to this is that Bill Gates is actually a "IV" not a III. And there is a space (ASCII 32) between his first and last name. Bill Gates may be a lot of things, but Satan he's not. ♦

DVORAK'S RECIPES OF THE MONTH

One way you can spot someone who is genuinely interested in cooking and good food is by the fact that they have a collection of cookbooks. I've collected cookbooks for decades and am always on the lookout for something unusual. I have a number of cook books that are West Coast or California specific and I'll read them casually to see what trends I might spot in regional cooking. What I find interesting about California cuisine is that no matter how far back you go researching cookery in California, the salad seems to reign supreme. Californians are known for being salad eaters in every cookbook I've ever found. This penchant for the mixed green salad has permeated most of French and American cuisine although there are regions of France where they just cringe if you talk about California-style salads. Which brings us to the recipe of the month.

I stumbled upon a 1952 cookbook called the West Coast Cookbook by Helen Brown. Considered a collectible cookbook, there were a couple of interesting tidbits I gleaned from it including the original recipe for Green Goddess Salad dressing developed at the Palace Hotel in San Francisco. One thing that I stumbled on was something called Corte Madera Sour Cream Salad Dressing and the comment by the author that it was her favorite salad dressing "next to French and possibly Mayonnaise." I realized and recall hearing about the days of California salads when people would take lettuce and simply gob on spoonfuls of mayo and mix it up with some salt and pepper. Thank goodness those days are over. During the 1950s there seems to have been a penchant for substituting sour cream for mayo and the author laments this trend and calls it a recent fad. Still she puts sour cream in many of the recipes. Here are the two historic and interesting salad dressings cited in the book.

CORTE MADERA SOUR CREAM SALAD DRESSING

Ingredients: 2 hard boiled egg yolks 2 tablespoons of lemon juice 1 cup sour cream salt and pepper

Mash the yolks of two hard boiled eggs with the lemon juice and incorporate into the sour cream. I think it's an interesting recipe because it's simply a copy of the classic french Dijonnaise dressing with sour cream substituting for mustard... as the 1950s fad would have it!

OK, now here is the recipe for real Green Goddess dressing. I quote from the book.

"There have been innumerable imitations and variations of this famous salad dressing since it was first created at the Palace Hotel, in honor of George Arliss, who was opening in William Archer's play, THE GREEN GODDESS. This recipe is one given me by the Palace Hotel, and who should know better than they how it is prepared?"

I seriously doubt that the hotel still uses the original recipe...here it is.

GREEN GODDESS SALAD DRESSING

Ingredients: 8-10 fillets of anchovies
1 green onion
1/4 cup minced parsley
1/4 cup finely cut chives
2 tablespoons minced fresh tarragon
3 cups mayonnaise
1/4 cup tarragon vinegar

Mince anchovy fillets with the green onion, add minced parsley and tarragon. Then add the mayonnaise, the tarragon vinegar and the chives. Mix with salad greens in a bowl that has been rubbed with garlic.

Helen Brown notes: "There is a growing tendency to add sour cream to Green Goddess dressing, as there is to add it to almost everything. Do so if you wish, and cut down substantially on the mayonnaise." So much for keeping things authentic. ♦

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Microsoft Windows Sound System Compatible	Yes	No
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December 1994

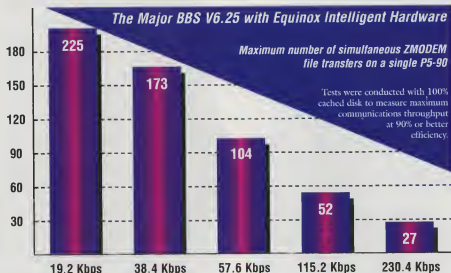


May 30, 1994

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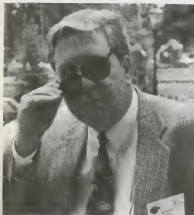
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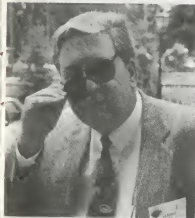
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